# COMMISSION OF THE EUROPEAN COMMUNITIES



Brussels, 24.8.2006 COM(2006) 463 final

# COMMUNICATION FROM THE COMMISSION TO THE COUNCIL AND THE EUROPEAN PARLIAMENT

Implementing the Community Strategy to Reduce CO2 Emissions from Cars: Sixth annual Communication on the effectiveness of the strategy

{SEC(2006) 1078}

EN EN

#### 1. Introduction

The Community's strategy to reduce CO<sub>2</sub> emissions from passenger cars and improve fuel economy<sup>1</sup> is based on three pillars, namely the Commitments of the automobile industry on fuel economy improvements<sup>2</sup>, the fuel-economy labelling of cars<sup>3</sup> and the promotion of car fuel efficiency by fiscal measures. Following Article 9 of Decision 1753/2000/EC<sup>4</sup>, the Commission is required to submit to the European Parliament and Council annual reports on the effectiveness of the strategy based on the monitoring data submitted by Member States<sup>5</sup>.

This Communication addresses the 2004 monitoring and the reviews that were launched during that year: in compliance with its Commitment, KAMA reviewed the potential for additional CO<sub>2</sub> reductions with a view "to moving further towards the Community's objective of 120 g CO<sub>2</sub>/km by 2012" (ACEA and JAMA had already done so in 2003, as foreseen in their Commitments). Besides, following Article 10 of Decision 1753/2000/EC, the annual Communication, for KAMA's intermediate target year (2004), should indicate whether the reductions achieved by KAMA are due to technical measures taken by manufacturers or to other measures such as changes in consumer behaviour (not linked to technical measures taken by the industry). Finally, KAMA's voluntary Commitment contains the obligation to carry out, based on 2004 data, a joint "Major Review" with the Commission services (joint Major Reviews with ACEA and JAMA were carried out on the basis of 2003 data, as foreseen in their Commitments).

# 2. EVOLUTION OF THE AVERAGE NEW CAR FLEET CO<sub>2</sub> EMISSSIONS IN THE EU25 IN 2004

# 2.1. Progress made by the car industry with regard to their respective commitments (EU15)

As the first and foremost pillar of the strategy, the Commitments of the European, Japanese and Korean automobile manufacturers associations are designed to achieve total EU15<sup>6</sup> new passenger car fleet average CO<sub>2</sub> emissions of 140 g CO<sub>2</sub>/km<sup>7</sup> by 2008 (ACEA) and 2009 (JAMA and KAMA). The targets of the Commitments must mainly be achieved by technological developments affecting different car characteristics and market changes linked to these developments.

Measured according to Directive 93/116/EC as modified.

COM(95) 689 final and Council conclusions of 25.6.1996.

<sup>&</sup>lt;sup>2</sup> Commitments have been made by the European (European Automobile Manufacturers Association - ACEA) the Japanese (Japan Automobile Manufacturers Association - JAMA) and Korean (Korea Automobile Manufacturers Association - KAMA) automobile manufacturers associations.

Directive 1999/94/EC relating to the availability of consumer information on fuel economy and CO<sub>2</sub> emissions in respect of the marketing of new passenger cars, OJ L 12, 18.1.2000.

Decision 1753/2000/EC of the European Parliament and of the Council establishing a scheme to monitor the average specific emissions of CO<sub>2</sub> from new passenger cars, OJ L 202, 10.8.2000.

Information concerning the Community strategy can also be found on the following website: <a href="http://europa.eu.int/comm/environment/co2/co2">http://europa.eu.int/comm/environment/co2/co2</a> home.htm

Since the Commitments as recognised by the European Commission in 1999/2000 were undertaken at a time where the EU only included 15 Member States, their geographical scope is limited to the EU15.

#### 2.1.1. Overall progress made by the three automobile manufacturers associations in 2004

Annual joint monitoring reports have been drafted and agreed between the Commission services and the three automobile manufacturers associations, and are annexed to this Communication. The main findings for the reporting period 1995 to 2004 are (see also Table 1):

- In 2004, the average specific new car fleet CO<sub>2</sub> emissions were 161 g CO<sub>2</sub>/km for ACEA, which remains the frontrunner, and 168 g CO<sub>2</sub>/km for KAMA and 170 g CO<sub>2</sub>/km for JAMA<sup>8</sup> (see table 1 in the Attachment). Compared to 1995, the average specific CO<sub>2</sub> emissions have been reduced by 24 g CO<sub>2</sub>/km or 13% for ACEA, 26 g CO<sub>2</sub>/km or 13.3% for JAMA, and 29 g CO<sub>2</sub>/km or 14.7 % for KAMA;
- Compared to 2003 all three associations reduced, in 2004, the average specific CO<sub>2</sub> emissions of their cars registered for the first time on the EU market: ACEA by about 1.2 %, JAMA by about 1.2 % and KAMA by about 6.1 %. Since 1995, fuel efficiency improvements in diesel passenger cars have been greater than in gasoline vehicles and, along with the sustained increase in the share of diesel vehicles in the EU15 new passenger car market, this has made an important contribution to the overall progress achieved so far (see Table 3)<sup>9</sup>. This trend calls for further improving the performance of diesel passenger cars regarding the emissions of atmospheric pollutants, as proposed by the Commission in the recent EURO5 proposal<sup>10</sup>;
- ACEA and JAMA have pursued in 2004 an unbroken trend of CO<sub>2</sub> emissions reduction although their recent performance is lower than annual reductions in the first years of their commitments. ACEA already reached in 2000 the intermediate target range envisaged for 2003 and is since 2003 below the lower end of this range. JAMA is inside the intermediate target range since 2002. KAMA made a very significant progress and met its 2004 intermediate target range of 165-170 g CO<sub>2</sub>/km;
- In order to meet the final target of 140 g CO<sub>2</sub>/km major additional efforts are necessary, as the average annual reduction rates of all three associations need to be increased. Assuming a constant rate of improvement over the full period 1995-2008/9, the reduction would be some 3.5 CO<sub>2</sub>/km per year, or around 2 % per year. In the years remaining until 2008/9 the annual reduction rates must now reach an average of 3.3 % for ACEA, 3.5 % for JAMA and 3.3 % for KAMA. It was anticipated from the beginning that the average reduction rates would be higher in the later years. However, it is noted that the gaps to be closed, expressed in required annual performance, have further increased in 2004 (see Table 2). This is a cause of concern. The Commission will pursue its close monitoring of the Associations' achievements under their Commitments.

In 2004 the overall average CO<sub>2</sub> emissions of new passenger cars registered was lower in all fifteen Member States compared to 1995 and the years in between (see Figure 1 in the Attachment). However, the reduction rates differ somewhat from country to country 11.

\_

Since 2001 included data are corrected by 0.7 % to take into account the change in the test cycle.

The impact of fiscal incentives for diesel fuel in most Member States also likely contributed to the increased diesel vehicle share, and related reduction in average specific CO<sub>2</sub> emissions

COM(2005) 683 final.

No figure can be given for Greece and Finland for 1995 since data are not available.

## 2.1.2. KAMA's "Major Review" and work on Article 10 of Decision 1753/2000/EC

The voluntary Commitment to reduce new passenger car CO<sub>2</sub> emissions contain the obligation to carry out, based on 2003 (ACEA and JAMA) and 2004 (KAMA) data, a "Major Review". This Major Review should address the "...results of CO<sub>2</sub> emission reductions up to and including calendar year 2003/4, including comparison of that year's fleet average to the estimated target range." Moreover, it should take into account the initial expectation that "...The reduction in CO<sub>2</sub> emissions will not be linear; the pace will notably depend on the timing of availability of the enabling fuels on the market as well as on the lead-times for new technologies and products and their market penetration. The reduction profile is therefore expected to be relatively slow initially and to gather pace later."

Addressing some of these questions is also the subject of Article 10 of Decision 1753/2000/EC which requires that: "... The reports for intermediate target years and the final target year will indicate whether the reductions are due to technical measures taken by the manufacturers or to other measures such as changes in consumer behaviour."

Since the evaluations to be carried out under the "Major Review" and under Article 10 are partly overlapping, joint assessments have been carried by the Commission and the Associations. The previous annual Communication <sup>12</sup> addressed ACEA's and JAMA's 2003 "Major reviews" and the related evaluations under article 10. The present Communication only addresses KAMA's 2004 review exercise, focusing on the following crucial questions:

- (1) Have there been obstacles in place which hampered KAMA in meeting its Commitment, or that lead KAMA to under perform?
- (2) Have there been other factors apart from technological developments which resulted in reductions of the specific CO2 emissions of new passenger cars?

The answer to these questions are decisive for answering whether or not the observed CO<sub>2</sub> reductions up to and including 2004 shall be counted to their full extent, towards the achievement of the Commitment.

The joint assessment came to the following conclusion (detailed conclusions are annexed to the Joint Report with KAMA): the reduction in specific CO<sub>2</sub> emissions has been overwhelmingly achieved by technological developments, all applicable undertakings and assumptions specified in KAMA's CO<sub>2</sub> Commitment have been met, and the environment under which its members are operating has not prevented KAMA from meeting its Commitment. In summary, KAMA and the Commission conclude that KAMA has, during the period 1995 to 2004, met all the obligations stated in its Commitment. Despite having gone through a hard economic situation during the first years of the commitment period, the Korean car industry has contributed to the EU strategy for reducing CO<sub>2</sub> emissions and to its Kyoto reduction objectives, as foreseen in its Commitment.

These findings also highlight another aspect of the implementation of the strategy: the limited impact so far of measures taken under the other two pillars, labelling and fiscal measures (see paragraphs 3 and 4 respectively).

\_

COM(2005) 269 final.

# 2.1.3. KAMA's Review on the potential to move further towards the Community target of $120 \text{ g CO}_2/\text{km}$

As foreseen in its Commitment, KAMA presented in December 2004 the results of its "review on the potential for additional CO<sub>2</sub> reduction, with a view to moving further towards the Community's objective of 120 g CO<sub>2</sub>/km by 2012". In its position paper, KAMA states that the technological potential to achieve the Community target of 120 g CO<sub>2</sub>/km in 2012 is available by combining further progress in conventional technologies with a substantial share of hybrid vehicles (25.3%), but stresses that, in its view, this will lead to "an excessive financial burden on KAMA and consumers alike". CO<sub>2</sub> reductions equivalent to the Community objective could be achieved in a more cost-efficient manner by using an integrated approach involving the automotive industry and other actors, including oil/fuel suppliers, public authorities, drivers etc.

In fact, in addition to the three pillars of the strategy, several other options could contribute to the Community's strategy to reduce CO<sub>2</sub> emission reductions from passenger cars and light commercial vehicles. Taking into account this position paper, and the position papers provided in 2003 by ACEA and JAMA, the Commission has decided to carry out in 2005-2006 a review of the Community's strategy to reduce CO<sub>2</sub> emissions from passenger cars and light commercial vehicles. In view of the existing Community objective of a new car fleet average emission of 120 g CO<sub>2</sub>/km, the Commission will review the options available to further reduce CO<sub>2</sub> emissions from passenger cars and light commercial vehicles, subject to an impact assessment and taking into account the work of the CARS21 high-level group. This review will be carried out under the framework of the European Climate Change Programme. The Commission intends to present a Communication on a revised strategy to the European Parliament and Council in the second half of 2006.

## 2.2. Average new car fleet CO<sub>2</sub> emissions in the EU25 in 2004

Separate from the 2004 joint monitoring exercise and further to the EU enlargement, average new car fleet  $CO_2$  emission data became available for the first time in 2004 for most new Member States (Slovakia and Malta did not deliver data in 2004). The following table presents the EU15, EU10 and EU 25 situation:

	2004 Monitor of EU	_	2004 Monitor of EU 1	ring data 0 <sup>13</sup>	2004 Monitoring data of EU 25 <sup>13</sup>		
Fuel	Registrations	g Registration		g CO <sub>2</sub> /km	Registrations	g CO <sub>2</sub> /km	
Petrol	7.001.245	170	533.665	158	7 534 910	169	
Diesel	6.787.834	155	168.284	151	6 956 118	155	
Petrol+Diesel	13.789.079	163	701.949	156	14 491 028	162	

<sup>&</sup>lt;sup>13</sup> COM(2005) 269 final.

It is noteworthy that the EU10 average CO<sub>2</sub> value is circa 4% lower than that in EU15, and that the total number of registrations in EU 10 represents only circa 5% of the EU15 registrations. Besides, while diesel vehicles represent now around 50% of the new registrations in EU 15, they represent less than 25 % in the EU10<sup>13</sup>.

## 2.3. Data quality

The "Monitoring" Decision 1753/2000/EC was adopted by the European Parliament and Council on 30 August 2000. Data collected under this Decision for the year 2002 onwards are used as official data for the monitoring of the voluntary commitments. For earlier years, data supplied by the associations were used for the monitoring.

This transition in the datasets, reflected in a discontinuity between the associations' data series and the official EU data series, also brought to light minor discrepancies. Over the past years, efforts were made to identify the reasons for the observed differences and improve data quality. Overall, EU15 official data are considered satisfactory by the three associations, and the gap with the data provided by the industry is very limited. Work on data quality with Member States will be pursued, so as to further increase their accuracy and representativity of the EU15 and EU25 situation.

#### 3. IMPLEMENTATION OF DIRECTIVE 1999/94/EC

All Member States have notified the measures transposing Directive 1999/94/EC<sup>14</sup> relating to the availability of consumer information on fuel economy and CO<sub>2</sub> emissions in respect of the marketing of new passenger cars. As regards the implementing Commission Directive 2003/73/CE, Austria and Greece have not yet notified the related measures. On the basis of Member States' reports on the implementation of Directive 1999/94/EC, a study<sup>15</sup> was carried out for the Commission in 2004 in order to assess the effectiveness of this legislation, and possible options for improvement. The results of this study, presented to stakeholders in early 2005, show that in general the effectiveness of the Directive seems to be low, as a significant impact on consumers' decisions could not be noticed. The most promising options for improving the current legislation with the aim of enhancing consumers' awareness about fuel efficiency and CO<sub>2</sub> emissions lie with the introduction of energy efficiency classes on the label, and a further harmonisation of its design.

Building on this evaluation and as part of the overall review of the strategy to reduce CO<sub>2</sub> emissions from passenger cars and light commercial vehicles, the Commission will assess in 2006 the need to put forward an amending proposal in order to improve the Directive's effectiveness.

OJ L 12, 18.1.2000, p. 16.

<sup>&</sup>quot;Study on the effectiveness of Directive 1999/94/EC relating to the availability of consumer information on fuel economy and CO<sub>2</sub> emissions in respect of the marketing of new passenger cars", ADAC for the European Commission, Final report, March 2005, downloadable at http://europa.eu.int/comm/environment/co2/co2 directive.htm

#### 4. WORK ON FISCAL MEASURES

In 2002 the Commission adopted a Communication<sup>16</sup> on the taxation of passenger cars in the European Union. The Communication contained a number of policy options for future action and was followed by a wide consultation of Member States, the European Parliament, the car industry and other important stakeholders. Further to this consultation, the Commission adopted in July 2005 a proposal for a Directive<sup>17</sup> on passenger car related taxes aimed *inter alia* at requiring Member States that have such taxes to include a CO<sub>2</sub> element in their calculation, so as to promote the purchase of fuel efficient cars.

#### 5. OTHER RELATED MEASURES

The Environment Council in its conclusions of 10 October 2000 requested the Commission to study greenhouse gas emission reduction measures on light commercial vehicles (also referred to as "N1" vehicles<sup>18</sup>) and air conditioning systems used in passenger cars<sup>19</sup>.

With regard to N1 vehicles, Directive 2004/3/EC<sup>20</sup> will require the measurement of CO<sub>2</sub> emissions and the provision of related information for this vehicle category. The Commission has furthermore launched a contract on the preparation of reduction measures for CO<sub>2</sub> emissions from N1 vehicles<sup>21</sup>. With regard to mobile air conditioning, the Commission similarly launched a contract in order to develop a measurement procedure to evaluate the impact of air conditioning use on fuel consumption<sup>22</sup>.

Potential greenhouse gas reductions from N1 vehicles and mobile air conditioning systems will be considered by the Commission as part of the integrated approach in the review of the strategy on CO<sub>2</sub> emissions from passenger cars and light commercial vehicles (see 2.1.3).

<sup>&</sup>lt;sup>16</sup> COM(2002) 431 final.

<sup>17</sup> COM(2005) 261 final.

N1 vehicles are defined as vehicles used for the carriage of goods and having a mass not exceeding 3.5 tonnes

The Environment Council of 10 October 2000 concluded, that

<sup>&</sup>quot;In the field of transport policy, the Council requests the Commission to study and prepare measures in the following areas, taking into account the rate of increase in emissions from the transport sector, as well as the need to reflect the social and environmental costs for each mode of transport, as also outlined in the report to the European Council of Helsinki:

<sup>-</sup> reduction of  $CO_2$  emissions from vehicles, in particular to reduce  $CO_2$  emissions from light duty vehicles

<sup>-</sup> reduction of all greenhouse gas (GHG) from air conditioning in vehicles".

Directive 2004/3/EC amending Council Directives 70/156/EEC and 80/1268/EEC as regards the measurement of CO<sub>2</sub> emissions and fuel consumption of N1 vehicles, OJ L 49, 19.2.2004, p. 36.

<sup>&</sup>quot;Measuring and preparing reduction measures for CO<sub>2</sub> emissions from N1 vehicles", TNO for the European Commission, December 2004, available at:

http://europa.eu.int/comm/environment/co2/pdf/a 9482 final%20report.pdf

<sup>&</sup>quot;Development of a procedure for the determination of the additional fuel consumption of passenger cars (M1 vehicles) due to the use of mobile air conditioning equipment", TNO for the European Commission, July 2005, available at: <a href="http://europa.eu.int/comm/environment/co2/pdf/a">http://europa.eu.int/comm/environment/co2/pdf/a</a> 16174.pdf

#### 6. CONCLUSIONS

The Community's strategy to reduce CO<sub>2</sub> emissions from passenger cars and improve fuel economy aims at achieving an average specific CO<sub>2</sub> emission figure for passenger cars newly registered in the Community of 120 g CO<sub>2</sub>/km. The EU 15 average value achieved in 2004 was 163 g CO<sub>2</sub>/km<sup>23</sup>, compared to 186 g CO<sub>2</sub>/km in 1995, the reference year of the Community strategy – a reduction of about 12.4 %. The assessments carried out under the "Major Review" and under Article 10 of Decision 1753/2000/EC show that ACEA, JAMA and KAMA have, during the period 1998 to 2004, met all the obligations stated in their Commitments. The car industry has, in doing so, delivered a sizeable contribution to the EU strategy for reducing greenhouse gas emissions and to its Kyoto reduction objectives.

In order to meet the final target of the Commitments (140 g CO<sub>2</sub>/km) all three associations have to substantially increase their efforts. Based on the annexed Joint Reports, the Commission acknowledges that all three associations have reconfirmed their firm determination to make the best possible efforts to live up to their commitments. However, ACEA and JAMA were not able to provide firmer assurances than in the previous years that they will meet the 140 g CO<sub>2</sub>/km by 2008 (ACEA) and 2009 (JAMA), despite the commitment period drawing to an end; KAMA has achieved a very substantial reduction in 2004, and confirmed that it had no reason to believe that it would not live up to its commitment<sup>24</sup>. The Commission underlines the importance for the car industry of meeting the 140 g CO<sub>2</sub>/km target which the Commission considers achievable and to which the industry has committed. It also stresses the need for continued efforts towards technical research, development and demonstration on more efficient propulsion and auxiliary systems (including mobile air conditioning) for passenger cars and light commercial vehicles, with a view to achieving lower costs and improved performance, including overall efficiency and durability.

The position papers presented by ACEA, JAMA and KAMA<sup>25</sup> on their reviews on the potential to moving further towards the Community's objective of 120 g CO<sub>2</sub>/km by 2012 indicate that the associations consider that an integrated approach, as opposed to focusing only on car technology, is necessary. To focus on car technology would, according to the associations, "seriously damage the future competitiveness and financial viability of the European car manufacturing industry, and weaken the EU economy" (ACEA).

The Commission has decided to carry out in 2005-2006 a review of the Community's strategy to reduce  $CO_2$  emissions from passenger cars and light commercial vehicles. In view of the 120 g  $CO_2$ /km Community objective, the Commission will review the options available, including legislative ones, to further reduce  $CO_2$  emissions from passenger cars and light commercial vehicles, subject to an impact assessment and taking into account the work of the CARS21 high-level group. It will be carried out under the framework of the European Climate Change and the Commission intends to present a Communication on a revised strategy to the European Parliament and Council in the second half of 2006.

Figure based on official EU data

It should be recalled that the Council invited the Commission "...to present immediately proposals, including legislative proposals, for consideration, should it become clear, on the basis of the monitoring and after consultation with the associations, that one or more of the associations would not honour the commitments made" (Council conclusions of October 1999).

<sup>25 2003</sup> for ACEA and JAMA, 2004 for KAMA

## **Attachment**

<u>Table 1</u>: Average specific CO<sub>2</sub> emissions of new passenger cars per fuel type, for each association and the EU 15

	CO <sub>2</sub> (g/km)											
	1995	1996	1997	1998	1999	2000	2001(3)	2002(3)	2003(3)	2004 <sup>(3)</sup>	Change 95/04 [%]	
ACEA												
Petrol	Petrol 188 186 183 182 180 177 172 172 171 170								-9.6 %			
Diesel	176	174	172	167	161	157	153	155	154	153	-13.1 %	
All fuels <sup>(1)</sup>	185	183	180	178	174	169	165	165	163	161	-13 %	
	JAMA											
Petrol	191	187	184	184	181	177	174	172	170	171	-10.5 %	
Diesel	239	235	222	221	221	213	198	180	177	170	-28.9 %	
All fuels <sup>(1)</sup>	196	193	188	189	187	183	178	174	172	170	-13.3 %	
						KAMA	4					
Petrol	Petrol 195 197 201 198 189 185 179 178 171 160							-17.9 %				
Diesel	309	274	246	248	253	245	234	203	201	189	-38.8 %	
All fuels <sup>(1)</sup>	197	199	203	202	194	191	187	183	179	168	-14.7 %	
EU-15 <sup>(2)</sup>												
Petrol	189	186	184	182	180	178	173	172	171	170	-10.1 %	
Diesel	179	178	175	171	165	163	156	157	157	155	-13.4 %	
All fuels <sup>(1)</sup>	186	184	182	180	176	172	167	166	164	163	-12.4 %	

<sup>(1)</sup> Petrol and diesel-fuelled vehicles only, other fuels and statistically not identified vehicles are not expected to affect these averages significantly.

<sup>(2)</sup> New passenger cars placed on the EU15 market by manufacturers not covered by the Commitments would not influence the EU15 average significantly.

<sup>(3)</sup> Figures for 2001-2004 are corrected by 0.7 % for the change in driving cycle. For 2002-2004 official EU15 data are taken.

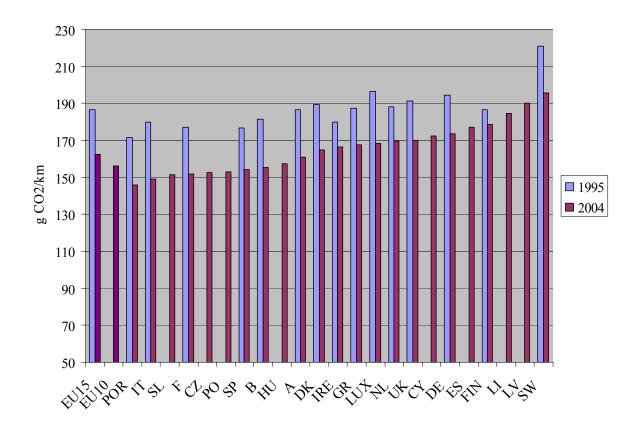
N.B.: ACEA figures given in this Communication include Rover/MG. However, since Rover/MG - which was initially covered by the Commitment as part of BMW- is no longer an ACEA member, ACEA has stated that the association cannot take any responsibility for Rovers'  $CO_2$  achievements up to 2008.

Table 2: Meeting the 140 g CO<sub>2</sub>/km target in 2008/2009

	EU15		Gap to the 140 g CO <sub>2</sub> /km target							
	1995*	2004** CO <sub>2</sub> (g/km)	7	Γotal	Per annum					
	CO <sub>2</sub> (g/km)		% from 2004 to 2008/9	g CO <sub>2</sub> /km from 2004 to 2008/9	% from 2004 to 2008/9	g CO <sub>2</sub> /km from 2004 to 2008/9				
ACEA all fuels	185	161	13	21	3.3	5.3				
JAMA all fuels	196	170	17.6	30	3.5	6				
KAMA all fuels	197	168	16.6	28	3.3	5.6				

<sup>\*1995</sup> figure based on Associations' data; \*\*2004 figure based on EU15 official data

<u>Figure 1</u>: Average Specific CO<sub>2</sub> emissions of new passenger cars in the EU15, EU 10 and in Member States in 1995 and 2004 (weighted averages based on the data for diesel and gasoline vehicles; for 1995, data as delivered by the associations; for 2004, official EU data are displayed and are corrected by 0.7 % for cycle change adjustment; no data available in 1995 for Greece, Finland and EU 10; no data available in 2004 for Slovakia and Malta.)



<u>Table 3</u>: Trends in composition of new cars registered on the market, for each association and the EU15

ACEA	1995	1996	1997	1998	1999	2000	2001	2002 (4)	2003 (4)	2004 (4)	Change'95- 04' (2)
Petrol	73.4%	72.9%	73.1%	70.3%	65.8%	60.9%	58.2%	56.3%	52.4%	45.4%	-28
Diesel	24.0%	24.3%	24.3%	27.0%	31.0%	35.8%	39.4%	43.6%	47.5%	51.9%	27.9
Totals (3)	10,241,651	10,811,011	11,226,009	11,935,533	12,518,260	12,217,744	12,552,498	11,649,782	11,533,323	11,668,101	13.9%
JAMA	1995	1996	1997	1998	1999	2000	2001	2002 (4)	2003 (4)	2004 (4)	Change'95- 04' (2)
Petrol	82.1%	82.1%	83.2%	81.6%	80.4%	80.8%	79.1%	77.3%	71.8%	65.6%	-16.5
Diesel	9.5%	10.4%	11.2%	13.1%	14.9%	16.5%	17.4%	22.6%	28.2%	30.9%	21.4
Totals (3)	1,233,975	1,342,144	1,510,818	1,666,816	1,716,048	1,667,987	1,520,643	1,501,937	1,703,960	1,843,728	49.4%
KAMA	1995	1996	1997	1998	1999	2000	2001	2002 (4)	2003 (4)	2004 (4)	Change'95- 04' (2)
Petrol	87.9%	87.6%	89.2%	85.9%	81.9%	80.9%	85.2%	77.8%	73.9%	69.5%	-18.4
Diesel	1.6%	1.8%	2.3%	6.1%	7.4%	8.3%	13.9%	22.0%	26.1%	26.4%	24.8
Totals (3)	169,060	236,454	275,453	373,230	463,724	491,244	396,792	325,436	427,341	589,542	249%
EU-15 (1)	1995	1996	1997	1998	1999	2000	2001	2002 (4)	2003 (4)	2004 (4)	Change'95- 04' (2)
Petrol	74.5%	74.2%	74.6%	72.1%	68.0%	63.9%	61.2%	59.2%	55.4%	49.6%	-24.9
Diesel	22.2%	22.4%	22.3%	24.7%	28.4%	32.6%	36.4%	40.7%	44.4%	48.1%	25.9
Totals (3)	11,644,686	12,389,609	13,012,280	13,975,579	14,698,032	14,376,975	14,469,933	13,477,155	13,664,624	14,101,371	21.1%

<sup>(1)</sup> New passenger cars put on the EU market by manufacturers that are not covered by the commitments do not affect the numbers significantly.

<sup>(2)</sup> The change over the period 1995 to 2004 for gasoline and diesel driven cars represents the change in the absolute share of each fuel type of total registrations. The change for the total cars is the growth or drop in absolute new registrations. The change in total cars represents the growth in the EU-15 new registrations over the period.

<sup>(3)</sup> Totals include statistically unidentified vehicles and vehicles using 'other fuel' types.

<sup>(4)</sup> For 2002-2004 the official EU15 data is taken

#### ANNEX (SEC(2006) 1078)

- (1) Monitoring of ACEA's Commitment on CO<sub>2</sub> Emission Reduction from Passenger Cars (2004), Joint Report of the European Automobile Manufacturers Association and the Commission Services, Final version of 25.11.2005
- (2) Monitoring of JAMA's Commitment on CO<sub>2</sub> Emission Reduction from Passenger Cars (2004), Joint Report of the Japan Automobile Manufacturers Association and the Commission Services, Final version of 25.11.2005
- (3) Monitoring of KAMA's Commitment on CO<sub>2</sub> Emission Reduction from Passenger Cars (2004), Joint Report of the Korea Automobile Manufacturers Association and the Commission Services, Final version of 25.11.2005.

The annexes are available only in English