

## For Auto Manufacturers and Auto Component Manufacturers

These questions apply to manufacturers of “non-commercial vehicles” and components for non-commercial vehicles. The scope encompasses all passenger cars, as well as light trucks and SUVs to the extent that they can be sold and used for individual passenger transport.

We suggest that companies use generally accepted nomenclatures of vehicle segmentation. Companies should provide an explanation if:

- A different vehicle segmentation system is used;
- Data cannot be provided according to the proposed nomenclature;
- Data is unavailable;
- Or is commercially sensitive.

The questions are divided into three parts:

**AU1** asks for actual and estimated sales of gas/petrol vehicles, diesel vehicles and alternatively powered vehicles. This applies to auto manufacturers only.

**AU2** covers the CO<sub>2</sub> emissions from vehicles you have sold and anticipate selling. This applies to auto manufacturers only.

**AU3** asks about the use of clean and new technologies in the vehicles you sell and/or equipment you supply. This applies to both auto manufacturers and auto component manufacturers.

## AU1.0 Sales volumes (to be answered by auto manufacturers)

Auto manufacturers should provide an overview of their historic, current and planned sales volumes by fuel type/engine technology and if possible by region and vehicle type. See the guidance for standard definitions of vehicle segmentation and regions. Please give sales figures in thousands of vehicles e.g. 38,000 vehicles sold should be entered as "38" in the tables.

### AU1.1 Sales of gas/petrol vehicles

		Reporting period ending in...									
		2002	2003	2004	2005	2006	2007	2008	2009 estimated	2010 estimated	2011 estimated
<b>Enter reporting period dates for each of the reporting years in this row e.g. 1 Jan 2002 – 31 December 2002 here:</b>											
<b>Region</b>	<b>Type</b>										
USA	Total										
Of which	Passenger cars total										
Of which	Two-seaters										
	Sedans mini-compact										
	Sedans sub-compact										
	Sedans compact										
	Sedans mid-size										
	Sedans large										
	Station wagon small										
	Station wagons mid-size										
	Station wagons large										
Of which	Light trucks & SUVs total										
Of which	Pick-up										
	Van										
	SUV										
	Others										

## AU1.1 Sales of gas/petrol vehicles Cont.

		Reporting period ending in...								
		2002	2003	2004	2005	2006	2007	2008	2009 estimated	2010 estimated
<b>Enter reporting period dates for each of the reporting years in this row e.g. 1 Jan 2002 – 31 December 2002 here:</b>										
<b>Region</b>	<b>Type</b>									
W. Europe	Total									
Of which	Segment A-B									
	Segment C									
	Segment D									
	Segment E-F									
	Others									
Japan	Total									
Of which	Large									
	Standard									
	Small									
	Mini									
China	Total									
India	Total									
Brazil	Total									
Russia	Total									
CEE	Total									
Other	Total									
	<b>TOTAL</b>									

AU 1.1.1 Companies should provide an explanation if different vehicle segmentation is used or if data is unavailable or commercially sensitive.

## AU1.2 Sales of diesel vehicles

		Reporting period ending in...								
		2002	2003	2004	2005	2006	2007	2008	2009 estimated	2010 estimated
<b>Enter reporting period dates for each of the reporting years in this row e.g. 1 Jan 2002 – 31 December 2002 here:</b>										
<b>Region</b>	<b>Type</b>									
USA	Total									
Of which	Passenger cars									
	Light trucks & SUVs									
W. Europe	Total									
Of which	Segment A-B									
	Segment C									
	Segment D									
	Segment E-F									
	Others									
Japan	Total									
China	Total									
India	Total									
Brazil	Total									
Russia	Total									
CEE	Total									
Other	Total									
	<b>TOTAL</b>									

AU1.2.1 Companies should provide an explanation if different vehicle segmentation is used or if data is unavailable or commercially sensitive.

### AU1.3 Sales of alternatively-powered vehicles

This category includes vehicles powered by Liquid Petroleum Gas (LPG), Compressed Natural Gas (CNG), fuel cells, compressed air, electricity and hybrids.

		Reporting period ending in...								
		2002	2003	2004	2005	2006	2007	2008	2009 estimated	2010 estimated
<b>Enter reporting period dates for each of the reporting years in this row e.g. 1 Jan 2002 – 31 December 2002 here:</b>										
<b>Region</b>	<b>Type</b>									
USA	Total									
W. Europe	Total									
Japan	Total									
China	Total									
India	Total									
Brazil	Total									
Russia	Total									
CEE	Total									
Other	Total									
	<b>TOTAL</b>									

AU1.3.1 Companies should provide an explanation if different vehicle segmentation is used or if data is unavailable or commercially sensitive.

## **AU2.0 CO<sub>2</sub> emissions of vehicles sold (to be answered by auto manufacturers)**

Investors realise that emissions indicators may vary from country to country, but they expect auto manufacturers to provide historical and projected CO<sub>2</sub> emissions (in gCO<sub>2</sub>/Km or gCO<sub>2</sub>/mile). Please refer to our guidance for conversion factors between fuel economy and CO<sub>2</sub> emissions.

**AU2.1** Please explain any historic and anticipated changes in the CO<sub>2</sub> emissions profile of vehicles sold (e.g. introduction of clean technologies, changes to sales mix) for the time period 2002-2013.

**AU2.2** Please explain the methodology used to calculate CO<sub>2</sub> emissions of vehicles sold and any differences with data published by industry associations or governmental agencies or the methodologies they have used. As the US Environmental Protection Agency adapted its driving cycles after 2007, companies should indicate if and when historical data for average CAFE have been recalculated using the new driving cycles (Reformed CAFE). More generally, companies are encouraged to provide comparable data over time and indicate changing methods.

### AU 2.3 Sales-weighted CO<sub>2</sub> emissions for gas/petrol-powered vehicles.

To sales-weight figures, we would ask companies to add the CO<sub>2</sub> emissions in gCO<sub>2</sub>/Km or gCO<sub>2</sub>/mile of every vehicle sold within each type and then divide by the total number of vehicles within that type. Enter that figure and the corresponding units in the table.

		Reporting period ending in...									
		Unit	2002	2003	2004	2005	2006	2007	2008	2009 estimated	2011 estimated
<b>Enter reporting period dates for each of the reporting years in this row e.g. 1 Jan 2002 – 31 December 2002 here:</b>											
<b>Region</b>	<b>Type</b>										
USA	Total										
Of which	Passenger cars total										
Of which	Two-seaters										
	Sedans mini-compact										
	Sedans sub-compact										
	Sedans compact										
	Sedans mid-size										
	Sedans large										
	Station wagon small										
	Station wagons mid-size										
	Station wagons large										
Of which	Light trucks & SUVs total										
Of which	Pick-up										
	Van										
	SUV										
	Others										

**AU 2.3 Sales-weighted CO<sub>2</sub> emissions for gas/petrol-powered vehicles** Cont.

		Reporting period ending in...										
		Unit	2002	2003	2004	2005	2006	2007	2008	2009 estimated	2011 estimated	2013 estimated
<b>Enter reporting period dates for each of the reporting years in this row e.g. 1 Jan 2002 – 31 December 2002 here:</b>												
<b>Region</b>	<b>Type</b>											
W. Europe	Total											
Of which	Segment A-B											
	Segment C											
	Segment D											
	Segment E-F											
	Others											
Japan	Total											
Of which	Large											
	Standard											
	Small											
	Mini											
China	Total											
India	Total											
Brazil	Total											
Russia	Total											
CEE	Total											
Other	Total											
	<b>TOTAL</b>											

AU2.3.1 Companies should provide an explanation if different vehicle segmentation is used or if data is unavailable or commercially sensitive.

## AU2.4 Sales-weighted CO<sub>2</sub> emissions for diesel-powered vehicles.

		Reporting period ending in...										
		Unit	2002	2003	2004	2005	2006	2007	2008	2009 estimated	2011 estimated	2013 estimated
<b>Enter reporting period dates for each of the reporting years in this row e.g. 1 Jan 2002 – 31 December 2002 here:</b>												
<b>Region</b>	<b>Type</b>											
USA	Total											
Of which	Passenger cars											
	Light trucks & SUVs											
W. Europe	Total											
Of which	Segment A-B											
	Segment C											
	Segment D											
	Segment E-F											
	Others											
Japan	Total											
China	Total											
India	Total											
Brazil	Total											
Russia	Total											
CEE	Total											
Other	Total											
	<b>TOTAL</b>											

AU2.4.1 Companies should provide an explanation if different vehicle segmentation is used or if data is unavailable or commercially sensitive.

### AU3.0 Clean technologies (for auto manufacturers and equipment suppliers).

Auto manufacturers should provide the percentage or number of new vehicles equipped with the technologies listed in the table. Equipment suppliers should provide the percentage of sales for each technology.

#### AU 3.1 Clean technologies (for auto manufacturers and equipment suppliers)

		Reporting period ending in...	
		2008	2013 estimated
Enter reporting period dates for each of the reporting years in this row e.g. 1 Jan 2002 – 31 December 2002 here:			
Category	Type		
<b>ICE</b>	Reduced friction loss		
	Improving Direct Injection		
	Downsizing with turbo charge		
	Variable valve timing/control		
	Optimised/Advanced cooling circuit		
	Exhaust heat recovery		
	Flexfuel (>B20: > E30)		
	Other (specify)		
	Other (specify)		
	<b>HYBRIDS</b>	Start-& Stop	
Start & stop & regenerative braking			
Mild hybrid (motor assisted)			
Full hybrid (electric drive)			
Other (specify)			
<b>ZERO EMISSIONS</b>	Full electric		
	Hydrogen fuel cell		
	Compressed air		
	Other (specify)		

**AU3.1 Clean technologies (for auto manufacturers and equipment suppliers) Cont.**

		Reporting period ending in...	
		2008	2013 estimated
<p>Enter reporting period dates for each of the reporting years in this row e.g. 1 Jan 2002 – 31 December 2002 here:</p>			
Category	Type		
<b>TRANSMISSION</b>	Optimised gearbox ratios		
	Piloted gearbox		
	Dual-clutch		
	Other (specify)		
	Other (specify)		
<b>BODY</b>	Improved aerodynamic efficiency		
	Weight reduction		
	Other (specify)		
	Other (specify)		
<b>OTHERS</b>	Low rolling resistance tyres		
	Advanced after-treatment		
	Other (specify)		
	Other (specify)		

AU3.1.1 Companies should provide an explanation if data cannot be provided according to the proposed nomenclature or if it is unavailable or commercially sensitive.