TECHNICAL INSTRUCTIONS FOR THE APPLICATION OF SUSTAINABILITY CRITERIA TO

VEHICLES

BARCELONA
AJUNTAMENT
+SOSTENIBLE

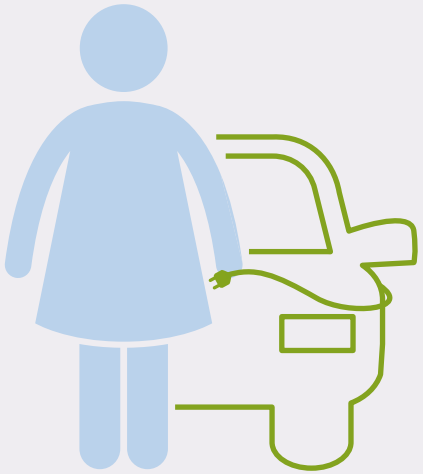
AREAS OF APPLICATION AND SCOPE

VEHICLES FOR ORDINARY USE (PURCHASING, LEASING OR RENTING)

SERVICES WITH VEHICLE USE

SUSTAINABILITY ASPECTS

Priority to acquire electric, hybrid or less-polluting alternative-fuel vehicles



Maximum power limited according to needs

Less consumption and fewer emissions

Efficient tyres

Efficient driving

TECHNICAL INSTRUCTIONS FOR THE APPLICATION OF SUSTAINABILITY CRITERIA TO VEHICLES

Following the lines of action established in the 2012-2022 Citizen Commitment to Sustainability, the Energy Self-Sufficiency Plan and the Plan for Improving Barcelona's Air Quality, Barcelona City Council is working to minimise the environmental impact caused by transport pertaining to municipal services.

These technical instructions are a response to the 2013 Government Measure for Responsible Public Procurement using Social and Environmental Criteria and the Mayoral Decree on Responsible Public Procurement using Social and Environmental Criteria of 20 November 2013, which provides for the publication of technical instructions that define specific environmental criteria that must be applied in the purchasing and contracting of groups of products and services that have been defined as priorities, which includes vehicles.

1 SUBJECT MATTER

These technical instructions aim to define, in accordance with the Mayoral Decree on Responsible Public Procurement using Social and Environmental Criteria, the criteria for environmental clauses for the acquisition of own vehicles (of any possible type: purchasing, leasing or renting) as well as for the services that include the use of vehicles,.

To achieve this objective, these instructions:

a. Classify the different types of vehicles

b. Define the priorities for acquiring them

c. Define the environmental criteria that must be applied when procuring the different types of vehicles

d. Define the environmental criteria that must be applied when contracting services that include the use of vehicles

e. Establish the monitoring system

2 AREA OF APPLICATION

2.1 Subject area

In accordance with the Mayoral Decree on Responsible Public Procurement using Social and Environmental Criteria, these instructions must be complied with in any public sector contract signed by Barcelona City Council and dependent organisations with the power to adjudicate (contracting authorities), whose contractual subject matter is outlined in Section 3, “Scope”.

2.2 Inclusion in procurement documents

All contracting bodies must comply with these instructions, and must guarantee that in all cases the basic environmental criteria are applied, according to the type of vehicle.

In the case of service contracts, contracting bodies must apply and adapt the basic criteria in accordance with the contract’s characteristics, so that their inclusion and compliance does not have any negative effects on the performance of the contracted service.

2.3 Exception and justification report

In accordance with the Mayoral Decree on Responsible Public Procurement using Social and Environmental Criteria, the competent contracting bodies or those responsible for contracting may consider that the contract’s characteristics are not suitable for including some or all of the environmental clauses set out in these instructions. In these cases, the competent contracting body must duly justify this in the procurement report, in accordance with the points set out in Section 4.2.

3 SCOPE

These instructions establish specific instructions for the following vehicles:

- Personal mobility vehicles (PMV) and mechanical elements, including bicycles with auxiliary propulsion (classified as L1e-A) and other electromechanical devices
- Two or three-wheel mopeds (classified as L1e-B and L2e), tricycles and lightweight and heavy quadricycles (classified respectively as L5e, L6e and L7e)
- Motorcycles with and without sidecar (classified as L4e and L3e, respectively)
- Passenger cars and off-road vehicles (classified as M1)

- Vans up to 3.5 tonnes (classified as N1)

These instructions are applicable to contracts for acquiring vehicles for normal use (including leasing and renting).

These instructions are also applicable to service contracts whose execution is based on the use of vehicles, provided that this application is compatible and does not negatively affect the quality of the contracted service.

In contrast, these instructions are not applicable to vehicles used for cleaning and waste collection in the city, nor to buses, which already have specific treatments.

Nor are they applicable to machinery or lorries, although the priorities and lines of action indicated in these instructions should inform their procurement.

In these instructions, any of the previously mentioned vehicles is classified according to the type of motor in electric, hybrid or fuel-driven vehicles[1].

4 PRIORITIES FOR VEHICLES

4.1 Motorisation priorities

The diversity of existing motors, in accordance with the above classification, and the differences regarding their associated environmental impacts, makes it necessary to establish a clear range of priorities that must be followed when deciding which type of vehicle is to be acquired:

Priority 1 All kinds of electric vehicles

Priority 2 Plug-in hybrid vehicles

Priority 3 Non-plug-in hybrid and gas vehicles (including bi-fuel vehicles)

Priority 4 Petrol-driven vehicles

Priority 5 Diesel-driven vehicles

The contracting body must always give preference to the type of vehicle following these priorities. In the case of not being able to choose the highest priority, electric vehicles, and in accordance with point 2.3 of these instructions, the contracting body must issue a report indicating the technical or economic reasons that justify the chosen option.

4.2 Justification report

The purchase of vehicles may respond to a wide variety of needs. Should the competent contracting body, for either technical or economic reasons, considers that the priorities, specific specifications or environmental criteria to be inapplicable, or where the contract itself is considered inappropriate for the application of these instructions, they must indicate and detail their reasons for this in a justification report, stating as a minimum:

- The special requirements and characteristics that the service contract requires;
- A reasoned justification explaining the infeasibility of balancing these special requirements with the established environmental criteria, or
- An economic justification based on applying the total cost of ownership (TCO) calculation.

This report will be made available to those responsible for monitoring these instructions, when required.

[1] *For detailed information on each type, go to Appendix I: Definitions*

5 ENVIRONMENTAL CRITERIA FOR THE PROCUREMENT OF VEHICLES

The basic environmental criteria that must be included in the procurement documents for vehicle acquisition according to the vehicle's main form of motorisation are detailed below:

Electric vehicles and plug-in hybrids	Maximum capacity
	Power consumption
	Standard range
	Useful life of batteries
Fuel-driven vehicles and non-plug-in hybrids	Maximum capacity
	Emission of polluting gases
	Average fuel consumption
	CO_2 emissions

The procurement documents must always guarantee that the bidders provide the documentation specifying the values of the listed parameters. The following articles indicate when the criteria can be included as technical specifications or as award criteria. In this latter case, the contracting body must determine the score given for compliance with each award criterion and the corresponding evaluation formula.

Where vehicles with different types of motor are to be acquired in the same tender, these types must be differentiated into lots (electric, hybrid and fuel-driven) and the corresponding criteria included for each lot.

5.1 Criteria for electric vehicles (of all kinds) and plug-in hybrids

When acquiring electric and plug-in hybrid vehicles, the following basic environmental criteria will always be taken into consideration.

As the electric-vehicle market is still in an incipient stage and the technology is developing in a very dynamic fashion, as a general rule these criteria should be included as award criteria, in order to favour the development of more efficient models[2].

I- Maximum power (in kW)

Before producing the procurement documents and in accordance with the requirements of use, the contracting body will determine the power that is necessary and sufficient, in order to avoid oversizing the vehicle pool and to reduce both purchasing and operational costs (consumption and maintenance).

Adjustment to the necessary and sufficient power must allow fleet diversification and will lead to the incorporation of lower-powered vehicles, also allowing a much quicker incorporation of electric-motor vehicles: bicycles, mopeds, motorcycles, electric quadricycles and small passenger and goods vehicles.

[2] *As a guideline, the contracting body may consult the information available in the Movele catalogue (http://www.movele.es).*

		Power (kW)
Vehicle	Bicycles with auxiliary motors	<1
	Mopeds and lightweight quadricycles	1 - 4
	Scooters and heavy quadricycles	4 - 11
	Small cars (people or goods)	up to 30

If the vehicle to be acquired, electric or plug-in hybrid, must have a performance equivalent to a conventional fuel-driven vehicle, the power will correspond to the designated range or segment (see maximum-power criteria for fuel-driven and non-plug-in hybrid vehicles).

II- Power consumption (in kWh/100 km)

The contracting body may establish a consumption value guideline, corresponding to the standardised average consumption, based on consulting available technical information (the Movele catalogue at www.movele.es) and, for cars, the information compiled in the IDAE database (http://coches.idae.es).

In any event, the contracting body will always include the evaluation of vehicles with lower consumption rates as an award criterion, with the previously mentioned power requirements.

III- Standardised range (en km)

The contracting body will establish in the technical specifications the minimum necessary range in accordance with the designated uses of the vehicle.

The vehicle's technical information states the range obtained during standardised-cycle approval, which differs from the real range[3]. Therefore the standardised range value specified in the technical specifications must be between 25 and 50% higher than the real range needed.

IV- Useful life of batteries

The contracting body will establish the requirement of a minimum 2-year or 1,000 recharging-cycle guarantee for batteries in the technical specifications.

As an award criterion, the contracting body will include the presentation of a guarantee for the battery to maintain 70% or more of its charging capacity after 100,000 km or 5 years.

5.2 Criteria for fuel-driven vehicles (of all kinds) and non-plug-in hybrids

For the acquisition of fuel-driven vehicles and non-plug-in hybrids, the following environmental criteria will always be taken into consideration.

The fuel-driven vehicle market is widely standardised, which makes it easy to obtain reference values as requirements in the technical specifications. This is always the case for passenger vehicles and in a more limited way for motorcycles. The range of hybrid vehicles on offer is still limited and fragmented into the various commercial segments.

III- Maximum power (in kW or CV)

Before producing the procurement documents and in accordance with the requirements of use, the contracting body will determine the power that is necessary and sufficient, in order to avoid oversizing the vehicle pool and to reduce both purchasing and operational costs (consumption and maintenance).

When the requirements of use rule out a vehicle in the lowest power range (mopeds and quadricycles), the contracting body will use the following power values as guidelines, and where the requirements permit, they will always be adjusted to the lower band of the corresponding range:

[3] *The 2012 Cetelem Observatory Survey on Automobiles.*

	Power range	
Motorcycles for urban use	10-15 CV or 7-11 kW	No special work or load requirements
	32-48 CV or 24-35 kW	With special work or load requirements
For passenger and goods vehicles for urban use	55-75 CV or 40-55 kW	No special work or load requirements
	75-105 CV or 55-80 kW	With special work or load requirements

Higher power ranges will only be necessary for special-fleet vehicles and in special-cargo cases, in accordance with assigned functions, such as:

- Function: for example, passenger vans for 7-9 people and adapted vehicles for people with reduced mobility.
- Transportation of goods of a significant weight or volume.
- Travelling over special terrain: beaches, tracks, mountains, etc.
- Response requirements in emergency or public-order situations.

II- NOx, particle and other pollutants (Euro standard)

The contracting body will always establish the Euro standard as the minimum requirement, according to the regulation's application schedule (see Appendix II). During transition periods, it may require a higher standard than the one currently in force, when this standard has already been approved and the contracting body has proof that there is sufficient offer on the market.

The contracting body must always include, as an award criterion, compliance with a higher Euro standard than the one established in the technical specifications.

III- Average standardised fuel consumption (l/100 km)

The contracting body will establish a maximum average standardised consumption value, based on consultation with available technical information, and in the case of cars, the information compiled in the IDAE database (http://coches.idae.es). In the case of vehicles with special requirements, the maximum values must not exceed, under any circumstances, the recommended values in the Generalitat of Catalonia's Guide for Green Procurement of Vehicles (see Appendix III).

The contracting body will always include, as an award criterion, that vehicles with the indicated power requirements show lower consumption rates than the maximum consumption indicated.

IV - CO_2 emissions (g/km)

The contracting body will establish a maximum value for CO2 emissions, based on consultation of the available technical information, and in the case of cars, the information compiled in the IDAE database (http://coches.idae.es). In the case of vehicles with special requirements, the maximum values must not exceed, under any circumstances, the recommended values in the Generalitat of Catalonia's Guide for Green Procurement of Vehicles (see Appendix III).

The contracting body will always include, as an award criterion, that vehicles with the indicated power requirements have lower CO2 emission rates than the maximum levels indicated.

5.3 Other optional environmental characteristics that may be evaluated improvements

The contracting body may optionally include additional environmental criteria as an environmental improvement of the offer[4]. Some examples are given below:

[4] *For further information, consult other manuals or reference documents on green public procurement.*

I- Biofuels (included only in the case of conventional petrol or diesel vehicles)

The accredited use of biofuels (bioethanol or biodiesel in each case) in a blend of over 10% will be evaluated.

Efficient tyres (for both electric and fuel-driven vehicles)

Fuel savings through equipping the vehicle with Class B tyres or higher according to the European classification will be evaluated.

Monitoring of tyre pressure (for both electric and fuel-driven vehicles)

Equipping the vehicle with a tyre-pressure monitoring system will be evaluated.

Refrigerant gas used in air conditioning

In cases where the vehicle has to be equipped with air conditioning, equipping the vehicle with the refrigerant gas that has the lowest global warming potential (GWP) will be evaluated.

6 CONTRACTING SERVICES THAT USE VEHICLES

In the event of contracting services whose performance is based on the use of vehicles, and without prejudice to the service's contractual objective, the contracting body must consider the inclusion of the following basic environmental criteria:

Contracting services that use vehicles

- Efficient driving
- Environmental quality of the fleet
- Age of the fleet

a) In the case of services that have exclusively assigned staff or vehicles

The criteria for the assigned personnel and vehicles will be evaluated.

b) In the case of services with no exclusively assigned staff or vehicles

The criteria will be evaluated based on the company's average, or Barcelona's territorial services that may be involved in carrying out the service.

I- Efficient driving

The contracting body will include as an award criterion that efficient-driving courses are included in the training of vehicle drivers. Depending on the type of service concerned, the contracting body must consider the possibility of requiring that a minimum percentage of the vehicle drivers have undertaken this training, and where this is so, establish that minimum at 30%.

This criteria may also be included as a bidder's commitment so that, in the event of being awarded the tender, the bidder makes a commitment to offer the efficient-driving course to its staff within a period of 3 months after the adjudication.

II- Environmental quality of the fleet

The contracting body will include the fleet's environmental quality as an award criterion. This quality criterion will be based on:

- The availability of vehicles with more efficient and less polluting technologies that are indicated in Priorities 1 (electric), 2 (plug-in hybrids) and 3 (non-plug-in hybrids and gas or bi-fuel) of these instructions.

- The lowest consumption and emission values corresponding to the values indicated in Priorities 4 (petrol-driven) and 5 (diesel-driven).

Depending on the type of service, the contracting body must consider the possibility of requiring a minimum percentage of low-emission vehicles[5] and where this is the case, it will establish this minimum at 30%[6].

III- Age of the fleet

In the case of services with exclusively registered vehicles, the contracting body may also establish a maximum age for the vehicles used for the service. The age may be established based on a minimum Euro standard or by the age of the vehicle:

	Age	
For services using class M1 and N1 vehicles	Euro 3 or 13 years	For services where old fleets are acceptable
	Euro 4 or 8 years	For services where old fleets are unacceptable

Alternatively, and in the case of Class L vehicles, the average age of the fleet may be evaluated.

7 MONITORING SYSTEM

In accordance with the Mayoral Decree on Responsible Public Procurement using Social and Environmental Criteria, the person responsible for the contract will awarded company complies with and executes the environmental clauses set out in the contract. While those managing the + Sustainable City Council Programme do not have an automated system to monitor the environmental aspects of contracts, the person responsible for the contract will supply the following information via the email address ajuntamentsostenible@bcn.cat:

- Procurement documents.
- Justification report on determining the type of vehicles established in the procurement documents (for all acquisitions that are not electric vehicles).
- Copy of the adjudication report, detailing the evaluation of the environmental criteria contained in the bids.
- List of acquired vehicles and their characteristics. In Appendix IV there is an example of a table with the information that needs to be gathered, which the people responsible for monitoring the instructions may modify.
- Copy of the technical data of each model of vehicle provided at the start of the contract's period of validity.

In the case of services with exclusively registered vehicles, in addition to the above information, a quarterly report must be provided detailing the vehicles' consumption of fuel or electricity and the total number of kilometres travelled.

Those managing the + Sustainable City Council Programme may request additional information from the contracting body.

[5] In accordance with the definition given in the environmental quality guarantee label for fleets of vehicles, low-emission vehicles are those indicated in Priorities 1, 2 and 3 of these instructions and those in Priorities 4 and 5 that do not exceed specific emission levels.

[6] Bidders may certify the fact that they are in compliance with this criterion and that of efficient driving, by presenting the guarantee label.For further information, go to Vehicle fleets at: www.gencat.cat/territori/distintiuambiental

8 TRANSITIONAL REGULATIONS / COMING INTO FORCE

These instructions will come into force 6 months after their publication.

These instructions are not applicable to call for tenders that are already open or concluded, nor to approved procurement documents or to call for tenders pending resolution that are dated prior to these instructions coming into force.

APPENDIX I DEFINITIONS[7]

Vehicle categories according to approved EU regulations[8]

Category L: 2 and 3-wheel vehicles (including vehicles with pedals and auxiliary propulsion) and lightweight quadricycles for road use.

Denomination of the categories and subcategories mentioned in the section entitled "Scope"		
	L1e	Lightweight, 2-wheel motor vehicle
		L1e-A: Powered cycles
		L1e-B: Two-wheel moped
	L2e	Three-wheel moped
	L3e	Two-wheel motorcycle
	L4e	Two-wheel motorcycle with sidecar
	L5e	Powered tricycle
	L6e	Lightweight quadricycles
	L7e	Heavy quadricycles

[7] *Many of the definitions are taken from the Generalitat of Catalonia's Guide to Green Vehicle Procurement, 2012. For further information, consult the document.*

[8] *For a more detailed classification and definition, consult Directive 2002/24/CE and Regulation (EU) 168/2013 for category L and Directive 2001/116/CE for the other categories.*

Category M1: Vehicles with a maximum of eight seats (excluding the driver), designed and manufactured for transporting passengers.

Category N1: Vehicles with a maximum weight of 3.5 tonnes, designed and manufactured for transporting goods.

Other vehicle categories

VMP: Vehicles and mechanical items for personal mobility. This concept includes all kinds of electromechanical devices (such as electric skateboards, Segways, etc.), as well as bicycles with auxiliary propulsion (classified as L1e A).

Types of vehicle according to their type of motor

Electric vehicles: Vehicles powered exclusively by electricity, always using an electric motor. Electric motors can be differentiated into:

- Pure electric vehicle: an electric vehicle powered by a battery that is charged exclusively from a socket connected to the electricity grid. There may be various grids, from the general electricity grid to an exclusive recharging network.
- Long-range electric vehicle: an electric vehicle powered by a battery that is recharged on the grid, and which also has a fuel-driven engine that acts as an internal-recharging generator for those batteries.
- Hydrogen vehicle: vehicle with an electric motor and an electrochemical system for generating electricity (fuel cell) which uses the electrochemical reaction between hydrogen (which acts as fuel) and atmospheric oxygen. The hydrogen may be produced by the disassociation of this element from various energy resources, both renewable (biomass and water) and non-renewable (fossil fuels).

Hybrid vehicle: Double-drive electric or fuel-driven vehicle. These are vehicles that combine a conventional internal combustion engine (fuel-driven engine) with an electric motor. The two motors act as the driving force, either alternately (one or the other) or together (both concurrently, one supporting the other).For the user, we can differentiate between:

- A non-plug-in hybrid vehicle: a vehicle which powers the electric motor batteries internally, using the internal combustion engine, but never from the electricity grid.
- Plug-in hybrid vehicle: a vehicle like the one above, but its batteries can be recharged externally using the electricity grid, using an electric recharging point. This means that, according to its use, the vehicle can function at a high-level as an electric vehicle.

Fuel-driven vehicle: A vehicle powered exclusively by fuel, i.e., it is always powered by a conventional internal combustion engine. It uses a traditional engine, but technological advances in alternative fuels have given rise to new types:

- Vehicles using liquified petroleum gas LPG (also known as autogas or liquified gas) or NG (natural gas): a standard or adapted vehicle that uses gas to fuel its engine, either exclusively (a single tank) or as a supplementary fuel (also known as a bi-fuel vehicle).
- Flexifuel vehicles, with a basic petrol engine that can use a mixture of bioethanol in various concentrations up to 85%.
- Biodiesel vehicles, with a basic diesel engine that can use a mixture of biodiesel in various concentrations.

Alternative fuels

Biofuels: cfuels produced from organic matter, which can come from various sources (agricultural products, different kinds of organic waste, algae, etc.). They have various advantages over conventional fuels: they make savings in the use of fossil energy, they reduce sulphur oxide emissions, the main cause of acid rain, due to their low sulphur content, and finally in regard to CO_2, they form a capture-release cycle that does not increase the atmospheric concentrations of this gas. They can be used undiluted in adapted engines or as a mixture with conventional fuels:

- Bioethanol: this is an alcohol derived from plants that is produced using raw materials rich in sugar or starch, often beetroot, sugarcane and cereals. It has long been used in petrol engines as an additive (ETBE) to replace lead. It can be used in any vehicle in a 5% blend, and up to 10% in most vehicles without the need of any modifications, although in this case, regulations demand that the fuel be labelled (e10). Manufacturers have developed adapted vehicles known as FFVs (Fuel Flexible Vehicles) which can work on a blend of up to 85% bioethanol.
- Biodiesel: obtained from oleaginous plants (rape, soya, sunflower, palm, etc.) or from recycling used vegetable oil (non-mineral). It is used in diesel engines. In blends of up to 5% it can be used in any vehicle. Although tests have shown that higher percentage blends do not cause any problems either, manufacturers only allow the B5 blend and that often affects the vehicle's guarantee.

  In higher percentages, the fuel has to be labelled, indicating the percentage of the blend. There are also vehicles on the market that specifically allow higher percentage blends, which are then classified as such: B10, B12, B20, B30. Pure biodiesel, B100, can also be used as a fuel, and there are now some makes of lorry and certain agricultural machinery that are equipped with engines that use 100% biodiesel.
- Biogas: this is obtained from the methanisation of organic matter of varying origins and it is used as a substitute gas in compressed natural gas (CNG) engines.

Gaseous fuels: their advantage over conventional fuels is that they burn cleaner and also generate lower amounts of polluting emissions, especially nitrogen oxides and particles. For this reason they are considered to be an especially appropriate alternative for vulnerable areas, such as city centres and, in general, large cities and their surrounding areas. Above all, they require modifications to the fuel tanks and feed lines. There are two types:

- Compressed natural gas (CNG): this is mainly methane and is normally of fossil origin, extracted from underground wells.
- Liquified petroleum gas (LPG): this is a blend of butane (maximum 80%) and propane (minimum 20%).

Euro Standard

This is a European standard that regulates nitrogen oxide (NOx), hydrocarbon (HC), carbon monoxide (CO) and particle emissions for vehicle approval.

Since the standard was created in 1991, the European Commission has established increasingly strict emission limits (from Euro 1 to Euro 6) that have been introduced progressively. Each new standard is introduced in two phases: the first phase is for the approval of new vehicles, and the second is for their registration and sale.

The standard was created for passenger vehicles and has been gradually extended to include all kinds of vehicles. The process of Euro standardisation is not so advanced for motorcycles (and all other L-category vehicles), although progress is being made, and the aim is to merge it with the passenger-car standard.

Other relevant environmental aspects

Efficient tyres: The coming into force of Regulation (CE) 1222/2009 of the European Parliament and Council of 25 November 2009 (and its later modifications), has meant that since 1 November 2012, tyres must be labelled with information concerning their fuel efficiency, braking distance on wet surfaces and their exterior noise levels.

Tyre Pressure Monitoring System (TPMS): A tyre-pressure monitor is an electric system that informs drivers when their vehicle's tyre pressure falls below the recommended values, usually by means of a flashing dashboard signal. This system helps drivers to properly maintain the vehicle's tyres, improve safety and contribute to higher fuel performance.

Global Warming Potential (GWP): a measure that defines the comprehensive global warming effect over time of the instant emission of 1 kg of a greenhouse gas today, compared to that caused by CO_2[9].

[9] *Further information on GWP:: http://www.grida.no/publications/other/ipcc_tar/?src=/climate/ipcc_tar/wg1/248.htm*

APPENDIX II SCHEDULE FOR THE APPLICATION OF EURO STANDARDS

Motorcycles (Category L)	Euro 3	For new approvals 2006
		For all vehicles 2007
	Euro 4	2016
	Euro 5	2020
Vehicles (Categories M1 and N1)	Euro 3	For new approvals 2000
		For all vehicles 2002
	Euro 4	For new approvals 2005
		For all vehicles 2007
	Euro 5	For new approvals 09/2009
		For all vehicles 01/2013*
	Euro 6	For new approvals 09/2014**
		For all vehicles 09/2015**

*Initially scheduled for 01/2011, but in the end it was only applied to petrol-driven vehicles and delayed for diesel-driven vehicles.

** Except Class II (1305-1760 kg) and Class III (>1760 kg) N1 vehicles, established for 09/2015 for new approvals and scheduled for 09/2016 for all vehicles.

For more information, go to the section "European regulations on vehicle emissions" (www.gencat.cat).

ANNEX III DADES DE CONSUMS I EMISSIONS MÀXIMES ORIENTATIVES PER A VEHICLES DE LES CATEGORIES M1 I N1

Vehicles by commercial segment*		*Consumption l/100 km*	*CO_2 emissions in g/km*
Petrol	Small and mini	6	140
	Average saloon and family cars	4,5	180
	Large saloon and family cars	8,5	200
	Average MPV	8	190
	Large MPV	9	210
	Luxury MPV	10	230
	Small van	7	170
	Large van	11	250
	Small off-road vehicle	10	230
	Large off-road vehicle	12	270

Vehicles by commercial segment*		*Consumption l/100 km*	*CO_2 emissions in g/km*
Diesel	Small and mini	4,5	120
	Average saloon and family cars	6,5	160
	Large saloon and family cars	7,5	180
	Average MPV	7	170
	Large MPV	8	190
	Luxury MPV	9	210
	Small van	6	150
	Large van	10	230
	Small off-road vehicle	9	210
	Large off-road vehicle	11	250

*According to the classification in the IDAE car database

Source: The Generalitat of Catalonia's Guide for Green Vehicle Procurement, 2012

Notes:

1- Hybrid vehicles: There are only a few models spread over the different types and not always in all power segments. They always mean an improvement with regard to the indicated values for both consumption and emissions, with a minimum of 15% for low and high-powered vehicles, and up to 40% for medium-powered vehicles.

2- Vehicles using alternative fuels: There are only a few models spread over the different types and not always in all power segments. Consumption varies with respect to the table values (in the case of gases, the units also vary, kg/100 km). Although they burn cleaner, as their performance and consumption vary, so do the emissions per kilometre. In general, they show lower emission values than indicated, but these may be higher than those of conventional petrol or diesel-driven vehicles.

APPENDIX IV TABLE TEMPLATE WITH INFORMATION THAT NEEDS TO BE COLLATED FOR EACH VEHICLE

Number of units	Engine	Fuel	CATEGORY	Type	Consumption	CO_2 emissions	Euro Standard
	Electric Hybrid Fuel-driven	In the case of hybrid or fuel-driven: CNG LPG Petrol Diesel	L1e L2e L3e L4e L5e L6e L7e M1 N1	In the case of M1 and N1, it is necessary to specify: Small and mini Average saloon and family cars Large saloon and family cars Average MPV Large MPV Luxury MPV Small van Large van Small off-road vehicle Large off-road vehicle			