

Cleaning Catalonia's air through clean vehicle procurement

Exploring low emissions transport options and criteria



Image: pixabay.com

Procura+ Participant:	Government of Catalonia
Policy/approach:	Clean Vehicle Procurement
Targets/aims:	CO2 reduction: 7166.7 t/CO ₂ Energy reduction: 2120 (toe)

SUMMARY

- Catalan Government has multi-pronged approach to encouraging SPP of vehicles, including: provision of Green Vehicle Procurement Guide, development of specific government agreements to encourage procurement of low emission vehicles, supporting the Catalan Ecolabel, and promoting sustainable mobility.
- Through the GPP 2020 project, several low-carbon vehicle tenders were developed, which have encouraged wider practice change.
- Procuring efficiency in conventional vehicles is well established, and procurement must take next step to procure low-carbon technologies.
- Aligning policies across governmental levels sends clear signal to the market, which is able and ready to deliver more sustainable options.

Background

Catalonia is an autonomous region of Spain with a population of 7.5 million. The Government of Catalonia has devolved responsibility for certain legislative and policy areas, including the environment. The Ministry of Territory and Sustainability is the expert body for environmental policy and leads on the promotion of green public procurement (GPP) as a particular area of importance for achieving wider goals.

The Catalan Government uses GPP to support several strategic policies, including: reducing the negative impacts of production and consumption; ensuring the environmental performance of government actions; promoting eco-innovation and market transformation to transition towards a circular, green and competitive economy; and supporting other policies and instruments pursuing these objectives.

The Ministry of Territory and Sustainability works closely with the government's central purchasing body (the Central Supplies Commission of the Ministry of Economy) to progressively incorporate environmental criteria in the framework agreements and contracts concluded by the government. When it comes to decentralised procurement, the Ministry of Territory and Sustainability also provides tools and direct support to any government body which wishes to include environmental criteria in their tenders, including via the provision of GPP guides, training, direct support, and sharing good practice.

With regards to good practice, Catalan Government was also a partner in the [GPP 2020](#) project, which aimed to mainstream low-carbon procurement across Europe in support of the EU's goals to achieve a 20% reduction in greenhouse gas emissions, a 20% increase in the share of renewable energy, and a 20% increase in energy efficiency by 2020.

As part of this project, several low-carbon procurement processes were conducted and their potential energy and CO₂ savings evaluated. In Catalonia, this included several different approaches to procuring low carbon vehicles, such as:

- procurement of emergency and non-emergency medical transport services (see the full **case study**);
- lease of low-emission vehicles by the Roads Directorate General (see the full **case study**);
- lease-to-buy contract for fleets belonging to the Ministry of Home Affairs (including police and fire service) (see the full **case study**);
- renting electric scooters for the Barcelona City Police (see the full **case study**);
- lease-purchase of low-carbon cars for the Ministry of Territory and Sustainability (see the full **case study**);
- and, purchase of fully electric vehicles by the Barcelona Metropolitan Area (see the full **case study**).

Components of the approach

The Catalan Government's focus on low carbon vehicles aligns with wider environmental priorities within the region. Air pollution is a particular concern within the wider urban area of Barcelona, where Nitrogen Dioxide (NO₂) exceeds allowed annual mean limit values. Road transport is the

largest contributor to air pollution in the region, accounting for 51% of NO_x and 53% of PM₁₀ emissions, and has therefore been identified as a particular priority for action.

An Air Quality Plan of the Metropolitan Area of Barcelona has brought together 40 municipalities to combat air pollution, and several large scale actions have been implemented, including banning cars older than 20 years from being driven on weekdays (with free public transport for three years offered to those who do not buy another polluting vehicle), reducing speed limits, and creating large pedestrian 'superblocks' which will reduce space for vehicles, and instead create more attractive environments for cycling and walking.

The Catalan Government's approach to tackling air pollution via procurement has four main components: providing guidelines on the GPP of vehicles; government agreements on GPP; ecolabelling to aid identification of low carbon vehicles; and the LIVE Platform (a public-private platform for the promotion of sustainable mobility).

Guidelines on GPP of Vehicles

The [Green Vehicle Procurement Guide](#) (last updated in 2015 and next update planned for 2017) sets out clear and simple criteria which public procurers can follow in order to buy low emission vehicles (cars, vans and motorbikes), as well consider the use of vehicle fleets in the delivery of service contracts. It provides advice on both technical specifications and award criteria, and covers topics such as: Minimum European Emission Standard EURO (including NO_x, NMHC and particulate matter); maximum gCO₂/km; maximum energy consumption; minimum energy consumption class; and prioritization of technologies.

Government Agreements

Government Agreements underpin the Catalan Government's GPP activities. The first of these Agreements to promote GPP was put in place in October 2005, and created the Commission to Monitor Green Public Procurement. A second agreement on GPP measures was put in place in October 2009. Finally, a third Agreement, specifically focusing on the procurement of lower emission vehicles, has been put in place in January 2017. This supports the prioritization of purchasing lower emission vehicles (electric, hybrid and gas) by Departments and Agencies of the Government of Catalonia, and would require the inclusion of environmental clauses in all tenders related to the purchasing or leasing of vehicles - or services which use vehicles - as set out by the Guide for Green Public Procurement of Vehicles. This Agreement requires public procurers to issue an exceptional justification report if, because of technical or budgetary reasons, considers that the indicated priorities should not be applied by the Green Vehicle Procurement Guide.

Ecolabels

The Catalan Government supports the [Catalan Ecolabel](#). Environmental ecolabelling is very useful for verifying that goods or services meet required environmental characteristics. The Catalan Ecolabel is a regional voluntary ecolabel awarded to products and services which fulfil certain environmental quality requirements beyond what is compulsory under current regulations. It is awarded by the

Government of Catalonia, managed by the Directorate-General for Environmental Quality of the Ministry of Territory and Sustainability, and verified by a third party.

The Catalan Ecolabel is currently available for 30 defined product and service groups, including vehicles fleets (passenger cars, light duty vehicles, heavy duty vehicles, collective transport or special services). Suitability of a vehicle or fleet for the ecolabel is assessed against six criteria:

- Fleet management (monthly fuel record)
- Efficient driving (training, plans)
- Maintenance of vehicles
- Environmental label classification (according to the environmental label classification that General Traffic Division of the Government of Spain has developed)
- Euro standards (minimum)
- Low emission vehicles (including vehicles powered by electricity, LPG, natural gas or hydrogen, hybrid vehicles, or vehicles using diesel or fuel that complies as a minimum to Euro technology and does not exceed specific fuel consumption and CO2 emission maximums).
- Other actions of environmental commitment (ISO, EMAS, etc).

So far, 40 companies with a total of 6226 vehicles have achieved the Catalan Ecolabel.

In addition, the Catalan Government has collaborated with the General Traffic Division of the Government of Spain on the creation of the vehicles classification according to their pollution potential. Four categories of vehicles are outlined:

- Zero Emission i.e. electric vehicle with batteries (BEV), Extended-range electric vehicles (REEV), and plug-in electric vehicles (PHEV) with equal to or over 40km range, or fuel cell vehicle.
- Eco i.e. plug-in hybrid vehicles with a range of less than 40km, or non-plug-in hybrid vehicles (HEV) (CNG and LNG) or LPG vehicles.
- 'B' i.e. vehicles which meet gasoline Euro 3 or diesel Euro 4 and 5 standards
- 'C' i.e. vehicles which meet gasoline Euro 4, 5 or diesel Euro 6 standards.

LIVE Platform

The Catalan Government is part of the [LIVE Platform](#), a public-private platform for the promotion of sustainable mobility in Barcelona and Catalonia. The LIVE Platform is organised through working groups and commissions, and has been involved in various actions, including the promotion of public procurement of alternative powered vehicles (in particular electric and natural gas), disseminating the Catalan Ecolabel for fleets, and organising training sessions.

Results

The GPP 2020 project provided an opportunity to explore the extent to which SPP can contribute to energy efficiency and reduced emissions. The results of vehicle related tenders in the Catalan region are included in the table below.

GPP 2020 Tender	Description	Energy Savings (toe)	Carbon Savings (tonnes CO2)
Roads Directorate General - lease of low-emission vehicles (case study)	Leasing vehicles for road maintenance fleet over 48 month contract. Approach since adopted for all tenders.	63.3	202.7
Catalan Health Service - medical transport services (case study)	Urgent and Non-Urgent Medical Transport in 13 lots (according to territory) over maximum 10 year period.	1,289.1	5,095.9
Barcelona Metropolitan Area - purchase of fully electric vehicles (case study)	Acquisition of a minimum 10 electric vehicles for the BMA's vehicle fleet.	17.1	63.1
Ministry of Home Affairs - lease-to buy contract for vehicle fleets (case study)	Tender of 175 vehicles over 48 to 72/84 month contract (depending on lot: medium car, small cargo van, large off-road).	696	1,597
Barcelona City Council - renting of electric scooters for police (case study)	Renting 30 electric scooters over 48 month contract (with intention to extend over total fleet of 198).	23.5	88
Ministry of Territory and Sustainability - lease-purchase of low carbon cars (case study)	37 electric, hybrid and low emission diesel vehicles over 38 month lease-purchase contract.	31	120

In total, the above examples represent energy savings of 2120 (toe) and a reduction of 7166.7 tonnes of CO2 compared to benchmark levels. To put that in perspective, the 23.5 toe saved by the use of

electric police scooters equivalent to enough oil to fill 152 barrels!¹ In many cases, these tenders have led to the creation of new or even more ambitious procurement models in these agencies.

The full basis for calculation of expected savings, as well as details on the contents of each tender, is available in each respective case study.

Lessons learned

The Catalan approach shows that procurement can play a valuable role in contributing to wider environmental policy and public health goals. Through a multi-pronged approach to supporting SPP, alongside the development of good practice approaches in the GPP 2020 project, Catalonia is sending a clear signal to the market about the need for more sustainable vehicles. Specific lessons learned throughout these policy and procurement processes include:

- Establishing mandatory environmental requirements for public administrations is necessary to increase the number of vehicles brought or services contracted according to GPP requirements.
- Efficiency is already well established when it comes to the procurement of conventional vehicles. The challenge is now to take the next step and procure alternative technologies such as electric, hybrid or gas vehicles. The experience of the GPP 2020 tenders has proved that the market for low carbon vehicles is advanced and ready to deliver, thus specifications for low-carbon vehicles can and should be ambitious.
- As well as understanding the market, it is also important to consult the needs of vehicle users so that the product/service can fulfill real needs and avoid over-sizing/oversupply, thus realising further environmental benefits.
- By aligning EU, national and regional policies it is possible to send a very clear sign to markets and citizens about the importance of an environmental activity.

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¹www.gpp2020.eu/fileadmin/files/Tender_Models/GPP_2020_Tender_Model_Electric_Vehicles_AMB_Catalonia_March_2016_01.pdf

About Procura+

Initiated and co-ordinated by ICLEI, Procura+ is a network of European public authorities and regions that connect, exchange and act on sustainable and innovation procurement.

Connect.



We are a network of European public authorities that connect, exchange and act on sustainable and innovation procurement.

Exchange.



Our combined knowledge and experience allows us to provide advice, support and publicity to any public authority that wants to implement sustainable and innovation procurement.

Act.



The Procura+ Network joins forces to champion sustainable and innovation procurement at the European level.

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