



Lease-purchase of low-carbon cars

Ministry of Territory and Sustainability, Catalan Government

- 21% reduction of CO₂ emissions
- 17% energy savings



Vehicles provided by the last tender

- Conventional diesel vehicles
- 571 t CO₂ emissions
- 184 toe energy

GPP 2020 tender

- Electric, hybrid and low emissions diesel vehicles
- 451 CO₂ emissions
- 153 toe energy

Results

- 31 toe energy savings
- 120 t CO₂ savings

Contract tendered

- Tender for cars by the Ministry of Territory and Sustainability, Catalan Government
- 37 vehicles purchased to renew the car fleet
- 3 Lots tendered – Lot 1: 28 diesel cars; Lot 2: 6 hybrid cars; Lot 3: 3 electric cars
- 48 month lease-purchase contract, incl. repair and maintenance (possible 24 month extension) with a total cost of 943,008.00 € (excluding VAT)
- This tender forms part of the GPP implementation strategy of the Catalan Government, and contributes directly to the Government’s *Action plan for better air quality Horizon 2015*, and the *Energy and Climate Plan 2012-2020*



Procurement approach

Tendering followed the open procedure, and was divided into three lots¹:

Lot 1: 28 diesel cars for interurban travelling

Technical specifications	Award criteria (environmental: 6 points out of 100 points)
<ul style="list-style-type: none"> - Warranty for use of biodiesel (5% mixture) - Emissions standard: EURO 5 - Energy class: B - Maximum CO₂ emissions (g/km): 140 - Maximum fuel consumption (l/100km): 5.5 	<ul style="list-style-type: none"> - Lower CO₂ emissions than required (in the tender specifications): 3 points - Use of oil with recycled content: 1 point - Tyres with better Fuel Efficiency Class than class C: 1 point - Lower fuel consumption than required (in the technical specifications): 1 point

Lot 2: 6 hybrid cars

Technical specifications	Award criteria (environmental: 6 points out of 100 points)
<ul style="list-style-type: none"> - Emissions standard: EURO 5 - Energy class: B - Maximum CO₂ emissions (g/km): 100 - Maximum fuel consumption (l/100km): 4.5 	<ul style="list-style-type: none"> - Lower CO₂ emissions than required (in the technical specifications): 3 points - Use of oil with recycled content: 1 point - Tyres with better Fuel Efficiency Class than class C: 1 point - Lower fuel consumption than required (in the technical specifications): 1 point

¹ Verification schemes applicable: EURO emissions standard (regulation EC No 715/2007) and CO₂ emissions and fuel consumption (incl. voluntary energy class labelling) by Directive 1999/94 CE (transposed by RD 837/2002),

Lot 3: 3 electric cars**Technical specifications**

- Minimum battery life: 2 years or 1000 recharge cycles
- Energy class: A
- Reference electricity consumption (Wh/km): 125-135

Award criteria (environmental: 6 points out of 100 points)

- Battery life higher than required (in technical specifications): 2 points
- Regenerative braking technology: 2 points
- Energy efficiency display: 2 points

Contract clauses (applied to all lots)

Repair and maintenance: warrantee of compliance for the following environmental aspects:

- Hazardous waste: separated collection and delivering to authorised waste managers.
- No hazardous waste: good management according to general law and local regulations.
- Air emissions: good management, especially of exhaust gases, VOCs (when painting) and dust.
- Process waste water: no discharges containing Halogenated Carbons > 5ppm.
- Noise: compliance with levels established by general law and local regulations.



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Criteria development

- The ambition of the public tender was:
 - To introduce vehicles with alternative technologies and to improve energy diversification in public fleets.
 - For the rest of the fleet, to lease conventional vehicles with best environmental performance without a significant price increase.
- The criteria developed were based on the Vehicle Green Procurement Guide, edited by the Catalan Government.

Results

The offered vehicles (lots 1 & 2) presented lower CO₂ emissions and fuel consumption than required in the technical specifications (99 g/km and 87 g/km respectively), especially compared to conventional diesel vehicles (lot 1). Electrical vehicles (lot 3) fulfilled all award criteria, and offered up to 10 years battery life.

Calculations have been made based on the technical specifications (vehicle data sheet) using the GPP 2020 calculator for vehicles.

	CO2 emissions	Energy consumption
Low Carbon Solution	451 t	153 toe
Last Tender	571 t	184 toe
Savings	120 t	31 toe

The following results in relation to the last tender have been achieved:

- 21% reduction of CO2 emissions
- 17% energy savings

Lessons learned

- For this class the market offer vehicles with significantly better environmental performance than minima required (see technical specifications above).
- In the future, technical specifications could be set more ambitious or this could have higher weight in the award criteria.

Contact

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