



## Supply of luxury class cars and electric cars Federal Procurement Agency, Austria

- 16 % reduction of CO<sub>2e</sub>-emissions
- 16 % reduction of energy consumption



### Benchmark: Last tender (2012)

- Only diesel-engine cars
- 4,920 t CO<sub>2e</sub> emissions
- 1,536 toe energy

### GPP 2020-tender (2015)

- More efficient diesel-engine cars and electric cars
- 4,108 t CO<sub>2e</sub> emissions
- 1,284 toe energy

### Results

Over 3 years:

- Reduction of 811 t CO<sub>2e</sub> emissions
- Reduction of 252 toe energy

## Contract tendered

- Framework agreement for the supply of luxury class cars and electric cars by the Federal Procurement Agency (FPA), Austria.
- The tender was not divided into lots: The bidders had to offer luxury class cars as well as electric cars.
- Contract period: 2015-2018 (3 years)
- Volume of the tender (zero rated for VAT): around 2 Million Euro
- Some environmental criteria are based on criteria defined in the Austrian Action Plan for sustainable public procurement.



## Procurement approach

The tender was accomplished using an open procedure.

The contract was awarded to the technically and economically most advantageous tender. The following award criteria were included:

- Amount of total costs of ownership = the sum of the acquisitions costs, the service fees, the costs for fuel or energy and the residual value.
- Production of the vehicle under the provision of an environmental management system.
- Amount of CO<sub>2</sub>-emissions in g/km.

The best offer was identified by giving positive and negative points to each tender. The negative points resulted from the total costs of ownership – for each Euro of total costs of ownership, the tender got one negative point. The positive points were given to those tenders that fulfilled the other award criteria, for example the existence of an environmental management system. Negative and positive points were summed up and the contract was awarded to the tender with the highest number of points.

Luxury class cars	
<p><b>Technical specifications</b></p> <ul style="list-style-type: none"> <li>- Diesel engine with particulate filter</li> <li>- CO<sub>2</sub> emissions: max. 180 g/km</li> <li>- Fuel consumption: max. 6.5 l/100 km</li> <li>- Emission value CO: max. 480 mg/km</li> <li>- Emission value (HC and NO<sub>x</sub>): max. 220 mg/km</li> <li>- Emission value NO<sub>x</sub>: max.180 mg/km</li> <li>- Emission value PM: max. 5 mg/km</li> </ul>	<p><b>Award criteria</b></p> <ul style="list-style-type: none"> <li>- CO<sub>2</sub> emissions: 0 points for 180 g CO<sub>2</sub>/km, 2,000 points for 150 g CO<sub>2</sub>/km and less; linear regression in between the two figures</li> <li>- Production of the vehicle under the provision of an environmental management system</li> </ul>
<p><b>Verification:</b> Declaration of the tenderer. The tenderer has to provide verifiable documents when requested by the contracting authority.</p>	

Electric cars	
<b>Technical specifications</b> <ul style="list-style-type: none"> <li>- All electric drive</li> <li>- Output nominal power according to ECE R100: min. 75 kW</li> <li>- Maximum speed: min. 100 km/h</li> <li>- Range according to the New European Driving Cycle: min. 175 km</li> <li>- Capacity of the battery pack: min. 18 kWh</li> </ul>	<b>Award criteria</b> <ul style="list-style-type: none"> <li>- In the event of damage, single modules of the battery pack can be replaced</li> <li>- Rapid charging stations are available that offer a 80 % charge in 30 minutes</li> </ul>
<b>Verification:</b> Declaration of the tenderer. The tenderer has to provide verifiable documents when requested by the contracting authority.	

## Criteria development

The call for tender asks for the supply of luxury class cars with a diesel engine as well as for the supply of electric vehicles. That means that the supplier also has to offer electric cars.

Furthermore, the technical specifications and the award criteria also guarantees that the diesel-engine luxury class cars are energy efficient.

## Results

*For the calculation of the reduction of CO<sub>2</sub>-emissions and energy, the luxury class cars contracted in this 2015-tender (diesel engine and electric drive) were compared with the cars contracted in the last tender (2012, only diesel engine).*

	CO <sub>2e</sub> emissions	Energy consumption
GPP 2020 tender	4,108 t	1,284 toe
Benchmark: last tender (2012)	4,920 t	1,536 toe
Savings over 3 years	811 t	252 toe

**Calculation basis**

- The estimated mileage of the luxury class cars procured in the GPP 2020 tender is 55,000 km/year, the mileage of the electric cars is 5,000 km/year.
- We suppose that 153 diesel-engine cars and 18 electric cars are going to be purchased.
- The savings were calculated with the GPP 2020 calculator for vehicles.

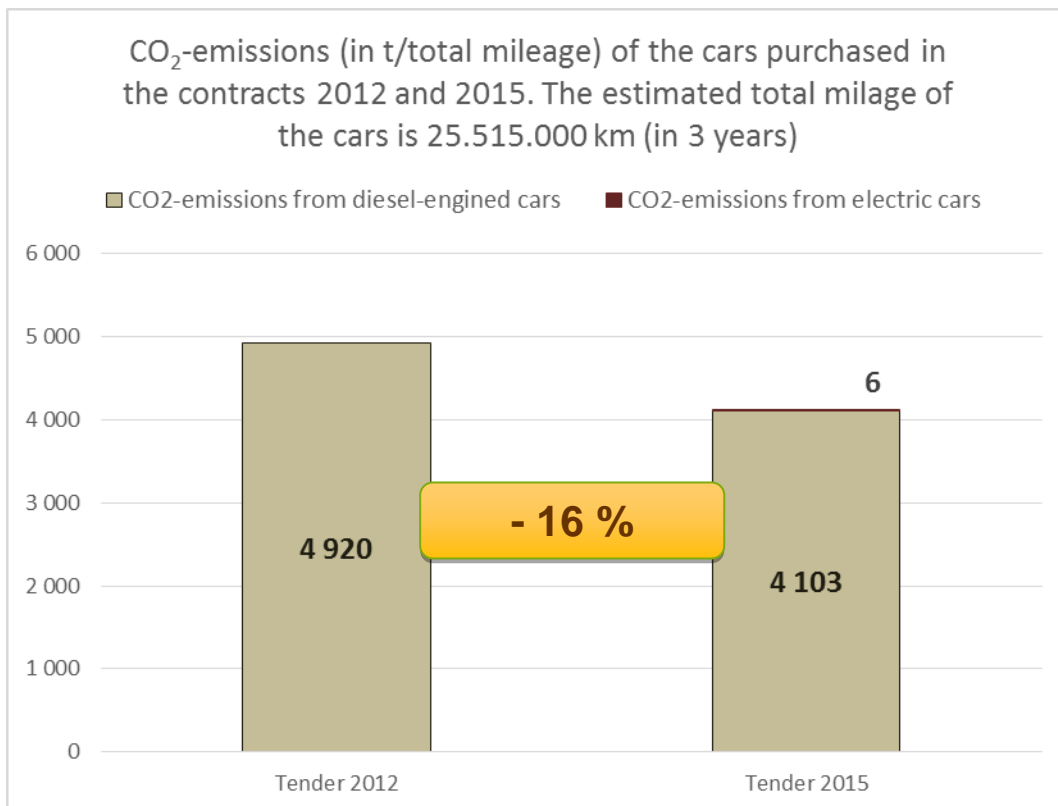


Fig. 1: CO<sub>2</sub>-emissions of the cars purchased in the contracts 2012 and 2015. The estimated mileage of the purchased cars is 25,515,000 km (in 3 years).

## Lessons learned

Compared to the cars purchased in the old tender (2012), the new cars (diesel-engine and electric drive) consume 16 % less energy and produce 16 % less CO<sub>2</sub>-emissions. At any rate if the assumptions are correct that 153 diesel-engine cars and 18 electric cars are going to be purchased from the framework agreement. These savings are already a remarkable success. An even better number of savings could be achieved with an increased share of purchased electric vehicles. The decision to purchase an electric car for shorter, inner-urban journeys in addition to the diesel-engine luxury class car is made by the ministries or the customers of the Federal Procurement Agency and not by the Federal Procurement Agency itself.



## Contact

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## About GPP 2020

**GPP**  
**2020** | procurement  
for a low-carbon  
economy

GPP 2020 aims 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.

To this end, GPP 2020 will implement more than 100 low-carbon tenders, which will directly result in substantial CO<sub>2</sub> savings. Moreover, GPP 2020 is running a capacity building programme that includes trainings and exchange. – [www.gpp2020.eu](http://www.gpp2020.eu)



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## About PRIMES



Across six countries in Europe; Denmark, Sweden, Latvia, Croatia, France and Italy, PRIMES project seeks to help municipalities overcome barriers in GPP processes, many of which lack capacity and knowledge.

PRIMES aims to develop basic skills and provide hands-on support for public purchasing organisations in order to overcome barriers and implement Green Public Purchasing. This will consequently result in energy savings and CO<sub>2</sub> reductions.

– [www.primes-eu.net](http://www.primes-eu.net)



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