



## Agency Leasing of an Electric Car for the Agency Fleet

Procurement Office of the German Federal  
Ministry of the Interior, Germany

- Electrical vehicle range increase of approx. 50% due to technical development of battery technology



### Previous Tender (2013)

E-car with Range-Extender &  
conventional car (petrol)

- 0,8 t CO<sub>2</sub>e/2 years
- 0,2 toe/2 years

### GPP 2020 Tender (2016)

E-car with Range-Extender

- 0,6 t CO<sub>2</sub>e/2 years
- 0,1 toe/2 years

### Conclusion

Increase of electrical range of  
approx. 50%

- 0,2 t CO<sub>2</sub>e/2 years
- 0,1 toe/2 years

## Contract tendered

- Within the framework of a “bid-free direct award” the 24-month agency leasing of an e-car with Range-Extender was concluded. The tender was carried out by the Procurement Office of the German Federal Ministry of the Interior.
- Contract volume: ca. 10.000 € (excl. VAT)
- The tender was carried out in accordance with the National Sustainability Strategy and the Government’s Sustainability Action Plan.

## Procurement Approach

The tender was concluded within the framework of a bid-free direct award:

Electric Vehicle	
<b>Technical Specifications</b>	<b>Award Criteria</b>
<ul style="list-style-type: none"> <li>- Electric vehicle with Range-Extender</li> <li>- Quick-Charge function</li> </ul>	<ul style="list-style-type: none"> <li>- Most favourable offer price</li> </ul>

### Conditions of Contract

- 24 month term

## Conclusions

The environmental effects of an annual distance of 5.300 km (or 10.600 km over 2 years) were ascertained. The following scenario was assumed: the 2013-acquired e-car (range extended by an additional petrol engine) with a purely electrical range of 160 km, covered 3.300 km annually. The remaining 2.000 km were covered by an additional petrol-powered vehicle. The newly acquired e-car (also with an additional range-extending petrol engine) possesses a purely electrical range of 240 km (an increase of 50 %). The annual distance of 5.300 km will be covered exclusively by the e-car.

	CO <sub>2</sub> e Emissions (t CO <sub>2</sub> e/2 years)	Energy Consumption (toe/2 years)
GPP 2020 Tender	0,6 t CO <sub>2</sub> e/2 years	0,1 toe/2 years
Benchmark	0,8 t CO <sub>2</sub> e/2 years	0,2 toe/2 years
Savings	0,2 t CO <sub>2</sub> e/2 years	0,1 toe/2 years

## Basis of Calculations

The environmental consequences were calculated for an annual distance of 5.300 km.

**Benchmark:** 3.000 km per year were covered by the electrical motor, 300 km were covered by the additional petrol engine (0,6 l/100 km). The additional 2.000 km/year were covered by a passenger car with a petrol engine (4,5 l/100 km).

**Low-Carbon Solution:** 4.800 km will be covered by the electrical motor, 500 km will be covered by the additional petrol engine (0,6 l/100 km).

**Electricity consumption of the e-car:** 12,9 kWh/100 km.

Calculations were made using the GPP 2020 vehicle calculator.

## Further environmentally-relevant conclusions



Due to improved battery technology, the new e-car can now be used for business trips of greater distance, which previously would have required the use of a vehicle with a combustion engine.

## Lessons Learned

Due to the constant progress in the development of battery technology, the purely electrical range of electrical vehicles is increasing. As a result, the possible applications of electric vehicles have extended. An increase, as in this case, of range by approx.. 50% is a further step towards increasing the acceptance of e-cars.

## Contact

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## About GPP 2020

The project “GPP 2020“ aims to encourage climate-friendly tendering processes throughout Europe and in doing so, to contribute to the achievement of the EU-specified goals for 2020: a 20% reduction of greenhouse gas emissions, an increase in the proportion of renewable energy sources to 20% and a 20% increase in energy efficiency.

GPP 2020 will carry out over 100 climate-friendly tendering processes to directly ensure a significant reduction in CO<sub>2</sub> emissions. Additionally, it offers educational and networking events on environmentally friendly public procurement in the energy sector.–

[www.gpp2020.eu/de](http://www.gpp2020.eu/de)

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