

SUSTAINABLE PERSONAL MOBILITY, AND ALSO FOR LONG DISTANCE POSSIBLE.

## From Madrid to Santander in electric car with zero emissions and zero refills



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We wanted to prove it crossing the Madrid-Santander with a 100% electric vehicle, without reloading on the way.

To make this first trip, zero emissions, we used one of the company vehicles of sustainable cultural tourism Drive & Dream, which has promoted the creation of the first network of points of fast charge of the Iberian peninsula, now operational, thanks to Paradores de Turismo.

Although we could have charged, midway, at the point of rapid recharge the beautiful Parador de Lerma, it was not necessary because we used for our trip, the new model of innovative American brand Tesla. The model S, No. 1 sales in Norway, No. 1 in security and leader in its segment in the US. According to official data, its autonomy is 500 km, and there is already a driver who has claimed to reach 620 km. Still not so clear that we were able to reach the Bay of Biscay, on a single charge, having to save two major mountain passes, Somosierra and shield, with heights of 1444 and 1011 meters respectively.

We have tried to make a drive as efficient as possible, always within the speed limits.

Ride comfort of Tesla's great. As we always say, once tested an electric vehicle no turning back. Its softness, his immediate response when required. The feeling of not polluting and not waste energy, the absence of noise, economy of use. It seems that all are advantages.

Although dependent on the generation of electricity and its supply, the good news is that the 100% electric vehicles are increasingly offering greater autonomy and being deployed grids, also on the road.

On our trip we want to show that it is even possible to make this important journey without stopping to recharge.

Upon reaching the Tesla Ecuador trip offered us a range of 290 km, when we subtracted 210 km to go. We continue ahead and, after passing through Burgos, we went in search of the port of the Shield. The regenerative capacity of electric vehicles is great. When you lift off the throttle the engine generates power back to the batteries. The Tesla Model S is capable of regenerating up to 60 kw. As we begin the ascent of the onboard computer Shield offered us a range of 131 km. At the end of the descent, more pronounced in the Cantabrian, and after traveling 24 km, the indicator announcing 133 km of autonomy.

The port of the Shield has ramps with an inclination of up to 17%. Incredibly, we could lower it without touching the brake at any time, only using the powerful regeneration system, engine brake, the Tesla.

Coming from the plateau, falling into the Bay of Biscay is steeper and longer, which added to energy efficiency and regenerative electric vehicle, made possible the balance of autonomy, as positive, the last leg of the journey.

We reached our goal with extra 100 km range, according to the estimate of the vehicle, and 27% charge in the batteries.

Knowing these test data, in the next official trip that will make electric car from Madrid to Santander to meet the President of the Spanish Network of Intelligent Cities and mayor of Santander, Inigo de la Serna, we can afford to go a little " light ".

On arrival of the computer data indicated Tesla: 410, 3 km traveled, 60 Kw consumed five hours and thirty-three minutes walk, an average consumption of 146 Wh per km and 100 km remaining autonomy.

We take kindly reload eon for free, until the 85kW capacity of the vehicle, in one of his public recharging points, specifically located in the Technological Park of Cantabria, and that allowed us to load at 60 km / h.