## Spanish Company Graphenano Claims Graphene Polymer Batteries with Triple the Energy Density of Lithium Ion

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<u>Graphenano</u> is a Spanish company based in Yecla (Murcia) and <u>they have presented their</u> graphene polymer battery that can largely solve obstacles to the development of the electric car.

They have a partnership with the Chinese company Chint. Chint paid 18 million euros for 10% of the Spanish company.

Grabat Energy, a subsidiary of Graphenano will have a plant in Yecla with 20 production lines. They will produce 80 million battery cells. In this first phase, Grabat will have 200 employees and an investment of 30 million euros, contributed equally by Chint and Graphenano.

The second phase will be much more ambitious. The Chinese company will contribute 350 million euros to Graphenano make a second factory in Yecla. They will form a joint venture to market their products in China. It is expected to have a global revenue exceeding 3 billion and 5,000 employees. They will have batteries for home, mobile, aircraft also produce for bicycles, motorbikes, cars and drones. Grabat has achieved a battery with a range of 800 kilometers and a weight of just 100 kilograms that can be loaded into a conventional outlet only one – third the

time required by a lithium-ion-lithium equivalent (which are riding automakers in their electric models). Mario Martinez said in a high-density plug "could be loaded in just five minutes."

Adapted to a car like the Tesla Model S, graphene polymer batteries would increase range from 334 to 1,013 kilometers. In a Nissan Leaf range would increase from 250 to 546 kilometers on a single charge.

The batteries are said to have a density of 1,000 Wh / kg and a voltage of 2,3V. Independent analyses by TÜV and Dekra show that the batteries are safe and are not prone to explosions like lithium batteries.