

RESEARCH CENTER LURA ENERGY DEVELOPMENT SUSTAINABLE MOBILITY

# Heroes of innovation, sustainability heroes



## Ricardo Fraguas

Sustainable mobility, generating clean renewable energy for a rational and responsible use allows us to eliminate the dependence on fossil fuels and move towards the final eradication of poverty, its way like never before.

There are a lot of very good and educated people dedicating their time and resources to enable the economic paradigm shift happen sooner. Inventors, developers creating and entrepreneurs able to consolidate the leap from innovation to create new business models that enable manufacturing and marketing products that incorporate advances and developments, so that everyone can enjoy its possibilities.

To accelerate the pace, "capital conscience", as you come to call the evolution of the formerly known as "smart capital" is essential to have people who run big cities that not only financial gain precedence over all others. Or maybe yes, but they do in the more long term, which is several generations.

I shared with you a few days, there is already a mainstream in these areas of big money called in English as the "Divest" ago, the divestment of businesses and related to the exploitation and marketing of fossil fuels and derivatives business, including drive vehicles based on that energy source.

Great investment analysts have managed to transcend the message that investment in the sector of fossil fuels is no longer profitable. Among other things because speeding is the end of life as we know it, I say yo.-yes, either by conscience or by an incomprehensible and boundless will to survive of the great fortunes in time and space , he has begun the withdrawal of investment capital to move from fossil fuel generation and use of clean renewable energy sector. Few months after the announcement of the withdrawal of the huge investments of the Rockefeller brothers -Fortune traditionally driving the development of combustion engines for transportation and petroleum economics investment funds around the world makes including the most prestigious Private universities in the world have followed suit in the "Divest" "movement".

## Blown downwind

Well, beginning by telling you that my dedication to spreading the message of hope does not stop me joy. And so it is. This job allows me to meet wonderful people of all kinds and origin delivered and decided in one way or another to make a better world in which more and more people have the opportunity to exercise the right to life and the pursuit of happiness, free , respecting each other and caring for our environment.

This past week I had the privilege to meet two young inventors in the Research Center LURA energy development and innovation of sustainability with a group of friends were launched in the Sierra de Madrid.

Angel Ramos and Luis Zuniga, as good and passionate researchers and innovators do not stop at one development and can go realizing his ability in several areas, with significant progress.

Currently focused its research and development on two main areas of activity, solar radiation and thermal energy with multiple applications and optimizing performance of electric motors for the transport. I must say that the first results of their work I have met seem as fascinating as are its people.

The main objective of young interdisciplinary team of the Center for Energy Research LURA is the contribution to the democratization of the generation and use of renewable energy in all areas and specifically in relation to sustainable mobility.

Their dedication is starting to pay off. A first patent filed, "the autonomous solar motor" an ingenious, simple and economic development that takes advantage of solar radiation to generate movement and a first application as "solar tracker" tracking system which allows PV panels greatly improve performance solar field, without using equipment and engines of conventional tracking systems.

LURA and venture into the winding road of the interests of each other, large multinational groups in the energy and industry capital of all kinds.

But Luis and Angel have good feet firmly on the ground. They are passionate about their work and know that their friendship and love of their families have much more than they can give them no capital. Although they want to generate some resources to devote to their own projects of social returns as its solar autonomous refrigerator is designed from the beginning for people in need in developing areas.

I get the impression that we will hear a lot of these new friends because Luis and Angel, with the invaluable help of David, are working in recent months on your system performance optimization of the electric motor used as motor fuel. Development able to double the power output with better energy efficiency than do market movers.

According to its creators this can be double the autonomy of a vehicle with the same batteries, without sacrificing performance. Can you imagine the Renault ZOE that of its 230 km of official NEDC autonomy of its latest version would happen to 460km of autonomy with the same 22kW battery?

Currently the developments are in experimental phase but much more advanced than we could imagine. I have been fortunate to work as a test driver in a first prototype two-wheeler. I can only say that, even equipped with a motor power rating of just 2 kW, delivering torque, acceleration exceeded sensations electric motorcycle 6kw I am used to driving. LURA development as well as improvements in the electric motor itself, which in turn try incorporates a gear ratio and two relationships.

In the coming days we will have the first results of yields. The unit you are working is a city scooter batteries LiFePO 3,4kw driver Kelly, who originally rode a wheel motor 5kw and offered a range of, about, 40km at full capacity and a top speed close to 80km / h.

After a few minutes of trial and demand, the little engine 2kw LURA treated showed no overheating.

I congratulate you publicly, LURA friends and wished with all my heart, that your findings are affirmed in the next test and measurement of performance and features to that soon may be applicable to all 100% zero emission electric vehicles. A development of this nature may, without doubt, contribute significantly to accelerate the pace of the transition to sustainable mobility definitely.

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