Ecological conversion of conventional cars into hybrid solar vehicles

Summary

Profile type	Company's country	POD reference
Technology offer	**Italy**	**TOIT20230419004**
Profile status	**Type of partnership**	**Targeted countries**
PUBLISHED	**Commercial agreement with technical assistance**	**• World**
Contact Person	**Term of validity**	**Last update**
Rita Elste - Tomsone	**19 Apr 2023** **18 Apr 2024**	**19 Apr 2023**

General Information

Short summary

Italian SME, working in the energy sector and in the sustainable mobility, developed a device for the ecological conversion of conventional cars into hybrid solar vehicles. The company offers commercial agreement with technical assistance.

Full description

The company is an Italian spin-off of the University of Salerno, founded by a group of professors and researchers from the Department of Industrial Engineering. The company deals with energy and sustainable mobility, developing solutions with high technological value capable of combining the needs of the market with those of the environment. The main project concerns the development and industrialization of a kit for the conversion of traditional cars into hybrid-solar vehicles.
The SME has developed some prototypes almost ready for industrialization (TRL 8/9), transforming conventional motor cars (Diesel, gasoline) into hybrid solar, by adding electric wheel motors in back wheels, a battery, and flexible solar panels. The system is patented in several countries. It allows to reuse cars often in good conditions, reducing fuel consumption and emissions, both during their use and, further, within a LCA perspective.
The company is looking for partners interested in the patented system, in order to expand his client portfolio.

Advantages and innovations

Cost reduction with respect to Hybrid Vehicle or Electric Vehicle: 20-40 %
Performance increase: 10 %
Other advantages:
- Vs Conventional vehicle: Reduction in consumption and emissions (up to 20% in typical urban use).
- Vs Electric Vehicle: lower cost. No problems of limited range and recharging time. CO2 reduction due to lower consumption related to hybridization and green solar power.
- Vs Hybrid vehicle: lower cost. Partial solar recharge of battery. More sustainable.
- Fuel consumption and emission reduction: up to 20% in urban driving.

Technical specification or expertise sought

Stage of development

Available for demonstration

IPR Status

IPR granted

Sustainable Development goals

- **Goal 7: Affordable and Clean Energy**

Partner Sought

Expected role of the partner

The partners would be all companies with fleets of cars, interested in installing the proposed solution.

Type of partnership

Commercial agreement with technical assistance

Type and size of the partner

- **Big company**
- **SME 11-49**
- **SME 50 - 249**
- **SME <=10**

Dissemination

Technology keywords

- **02008005 - Road Transport**
- **04005005 - Solar/Thermal energy**

Market keywords

- **006005001 - Solar energy**
- **06011 - Energy for Transport**

Targeted countries

- **World**

Sector groups involved