

## PRESS RELEASE

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# NEW PARTNERSHIP TOWARDS REDUCING RELIANCE ON FOSSIL FUELS IN TRANSPORTATION THROUGH VEHICLE-INTEGRATED PHOTOVOLTAICS

**On 3 March, LIST and Cactus Supermarkets signed a new partnership within the scope of energy transition and decarbonization of the transport sector based on vehicle-integrated photovoltaics, the first collaboration of its kind in Luxembourg.**

The largest Luxembourgish supermarket chain's values and mission towards sustainability aligned perfectly with the objectives of LIST' technology and innovation project, Solar e-Pace. The concept behind the project is called Vehicle Integrated/Attached Photovoltaics (VIPV or VAPV). The idea is to use photovoltaic solar technology applied directly on vehicles to convert sunlight into electricity that can satisfy part of the needs of electric vehicles, or even entirely for some auxiliary systems, such as the refrigeration systems used in food transport, if combined with storage capacity. The energy harnessed by the vehicles will help reduce their CO<sub>2</sub>eq (Carbon dioxide equivalent) associated emissions. Within the scope of this project, Cactus will put their fleet at the disposal of LIST researchers, in order for them to install the sensors and start measurements. LIST will also receive support from the logistics team at Cactus to ensure operational efficiency.

The collaboration between LIST and Cactus SA has a primary goal of creating the first comprehensive and representative nationwide dataset of the solar resource available on the road network in the Grand Duchy. This data will enable LIST's researchers to develop tools that can support the use of solar energy technologies in transportation in the future.

The partnership comes as part of Cactus SA's commitment to sustainability and its Corporate Social Responsibility (CSR) strategy, with the company looking to reduce its carbon footprint through the use of renewable energy.

"This cooperation agreement will be a natural extension of the work that LIST has been doing for years related to sustainable mobility and energy systems" said Lucien Hoffmann, director of the Environmental Research and Innovation department of LIST. "This agreement will expand our scope and allow us to collaborate closely with Cactus to drive innovative solutions to this urgent need."

Marc Hoffmann, Marketing and Retailing Director, Cactus SA said, "Our logistic teams have a goal of combining practicality with sustainability by freshly provisioning Cactus shops across Luxembourg daily. We are proud to partner with LIST in a scientific project that aims to advance innovative and sustainable mobility. This partnership explains the reasoning and approach behind our pursuit of this goal."

The partnership between LIST and Cactus Supermarkets is expected to have a significant impact on the environment and the community, by reducing the reliance on fossil fuels and supporting the transition to a more sustainable society.

## About LIST

The Luxembourg Institute of Science and Technology (LIST) is a research and technology organization (RTO) under the auspices of the Ministry of Higher Education and Research, and its mission is to develop competitive and market-oriented prototypes of products and services for public and private stakeholders.

With 680 employees, 75% of whom are researchers or innovators from all over the world, LIST is active in the fields of information technology, materials, space resources and the environment, and works across the entire innovation chain, from basic and applied research to technology incubation and transfer.

By transforming scientific knowledge into intelligent technologies, data and tools, LIST:

- helps European citizens make informed choices
- helps public authorities make decisions
- encourages companies to develop

For more information about the Luxembourg Institute of Science and Technology, please visit: <https://www.list.lu/>

## PRESS CONTACT:

### LIST

**Paramita Chakraborty**

Communication Officer

Tel: (+352) 275 888 2237

Email: [communication@list.lu](mailto:communication@list.lu)