



INNOVATION DRIVES YOU FORWARD

Press release

June 21, 2022

CHEREAU AND SONO MOTORS PARTNER TO DEVELOP SOLAR POWERED REFRIGERATED VEHICLES

Innovation has always been at the heart of CHEREAU's DNA, and the company is constantly looking for new solutions to make temperature-controlled transport even more virtuous.

After launching its new energy vehicle, in September 2021, and with the feedback from the tests of this vehicle with one of its customers, CHEREAU has decided to continue its tests in solar energy.

This vehicle has an electric cooling unit that can be powered by a 380 volt socket or by a battery pack. The battery pack is recharged by an energy recovery axle (E-Axle 24 Kw) or by the roof, entirely covered with solar panels (27 m²).

The body is a CHEREAU Performance equipped with VIP insulation (Vacuum Insulated Panels). Vacuum insulation is the best insulation available and allows energy savings of up to 25% on the refrigeration unit.

This more environmentally friendly vehicle is also equipped with the CHEREAU aerodynamic kit. The AeroTop-C allows a saving of up to 0.3L/100 km and the AeroFlap-C up to 0.7L/100 km. The two appendages combined offer a fuel saving of up to 1.1L/100 km.

For Damien Destremau, president of THE REEFER GROUP and CHEREAU: *"Protecting the environment and preparing the future is our choice" is one of our company's convictions. It guides us through our constant search for new and more environmentally friendly solutions for us as an industrial company and of course for our customers*".

Thus, CHEREAU is collaborating with solar mobility provider Sono Motors to manufacture an initial refrigerated vehicle and conduct extensive testing to evaluate the technical and economic feasibility of integrating a customized solar solution for a high-volume production vehicle.

This solution will provide the vehicle's refrigeration unit with an additional 9.8 kW, saving up to 8,475 liters of fuel and reducing local CO₂ emissions by more than 22 tons per year per vehicle for diesel-powered cooling units.

"This partnership with Sono Motors will allow us to conduct extensive tests to verify the suitability of solar energy in temperature-controlled transport. The solar integration solutions provided by Sono Motors are perfectly suited to our semi-trailers. This is a big step forward in making commercial mobility more sustainable and reducing emissions." says Damien Destremau.

This vehicle will be part of our demonstration fleet of new energy trailers and will be previewed at the 2022 IAA transportation.

Sono Motors will equip the roof and sides of an existing CHEREAU semi-trailer with 54 solar modules using the VaPV (vehicle applied photovoltaics) process that was developed specifically for refrigerated bodies. The high-efficiency, automotive-grade solar modules cover an area of 58.9 m² and will provide up to 9.8 kW of total energy at peak times. The solar energy will be used to run the refrigeration unit by recharging the main battery. This saves up to 6,000 liters of fuel and reduces local CO₂ emissions by more than 15 tons per year per vehicle on average for diesel-powered cooling units.



INNOVATION DRIVES YOU FORWARD

Press release

June 21, 2022

A test campaign will allow us to qualify this solution according to the different types of customer use. We already know that, as it stands, a battery pack alone does not offer sufficient autonomy. The contribution of the panels should significantly change the deal.



About Sono Motors

Sono Motors is on a mission to accelerate the mobility revolution by making every vehicle solar. Its innovative solar technology has been developed to enable seamless integration into all types of vehicles to reduce the impact of CO2 emissions and pave the way for climate-friendly mobility.

Sono Motors is developing the world's first solar electric vehicle (SEV) for the general public, the Zion. With a strong community, Sono Motors has collected more than 17,000 reservations and advance payments for the Zion. These vehicles will be produced through contract manufacturing.

Sono Motors' proprietary solar technology has been designed to enable integration and licensing for a wide range of vehicle architectures well beyond the Zion, such as buses, trailers, trucks, motor homes, trains and boats.

About CHEREAU

Specialized in the design and manufacture of refrigerated vehicles, CHEREAU is recognized by the entire profession for the high quality, longevity and first-rate performance of its products.

As a European specialist in refrigerated semi-trailers and trailers, CHEREAU stands out for its policy of continuous innovation and its custom-made, durable refrigerated bodies for trucks. They are at the service of the most demanding transporters and the products for which they are responsible.

CHEREAU is the first European manufacturer specialized in heavy duty refrigerated vehicles. It meets all the needs of road transport companies: meat, frozen products, pharmaceutical products, etc. and offers different types of vehicles (semi-trailers, rigids and other bodies).



INNOVATION DRIVES YOU FORWARD

Press release
June 21, 2022

CONTACT

CHEREAU

Aurore Leroyer
Communication and press relations officer



www.chereau.com



aurore.leroyer@chereau.com



+33 (0)6 65 55 80 78