



INNOVATION DRIVES YOU FORWARD

PRESS KIT

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■ INTRODUCTION

I look forward to seeing you at our now traditional annual press conference.

Remember last year, we focused on our change of ownership with the return of our entire capital to France and the launch of our CSR approach with the publication of our very first voluntary report.

We hoped at the time that the COVID crisis would quickly subside and that we would be able to return to a more normal and serene activity, but we have to admit that, although from a commercial point of view, the orders are there, for everything else it is extremely complicated. And this, in particular with the disruptions linked to the lack of electronic components which largely affects our production process and obviously, let's not be afraid of the word, the explosion of the price of raw materials, and the crisis in Ukraine which makes any projection extremely difficult.

This is the context in which we find ourselves, but we are not forgetting our medium and long-term objectives: to make the energy transition of our industry and our products as quickly as possible for more environmentally friendly temperature-controlled transport.

Beyond the short-term difficulties, we are convinced that this crisis is also an opportunity to help us in our inevitable and necessary transformation.

I invite you to discover through these pages our news and wish you a good reading.

Damien Destreamau,
Chairman and CEO

■ ALWAYS DOING BETTER TOGETHER

Our world is facing a necessary energy transition in order to drastically reduce global warming and its impact on the planet, but also on our daily lives and those of our children.

As some of you know, we presented our corporate values last year, and among them is that protecting the environment and preparing for the future is our choice. In practical terms, this means we don't want to wait for the law to tell us to be better.

Thus, we are deliberately anticipating very likely legislation, so that we can offer our customers relevant energy solutions to replace diesel and bring them to market quickly.

In Lyon, the theme of our stand was "ALWAYS DOING BETTER TOGETHER" and it continues to dictate our actions for the year 2022 through its four variations:

- Better preservation: the most virtuous energy is the one we do not consume
- Better consumption: new energies to preserve the environment
- Better protection: putting people at the heart of everything we do
- Making the most of your business: tailor-made support at your service



■ BETTER PRESERVE

THE MOST VIRTUOUS ENERGY IS THE ONE WE DO NOT CONSUME

The energy transition is not only about replacing diesel with electric or other forms of energy, but also about designing vehicles that consume less energy.

CHEREAU OPTIONS FOR ENERGY SAVINGS

Discover the options that allow, depending on the type of activity, to save energy related to the refrigeration unit.

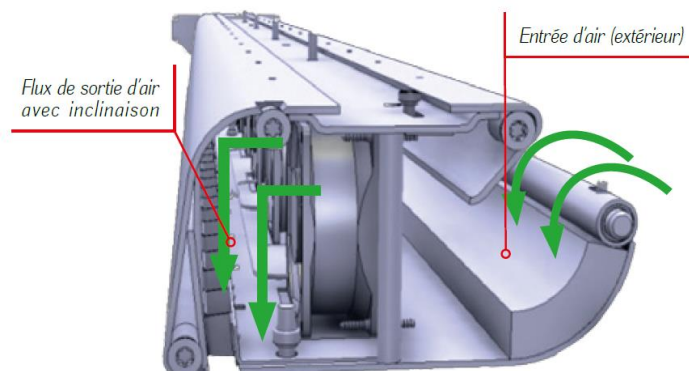
- **Automatic shutdown of the unit when the doors are opened**

Technically there is nothing extraordinary, it is simply a matter of connecting the refrigeration unit to a door sensor.

However, this good practice is essential because, when the unit is running, the fresh air in a trailer is very quickly replaced by outside air when the door is opened.

- **Intelligent air curtain that preserves indoor temperature**

The air curtain is an excellent complement to prevent air exchange between the interior and exterior.



- **Interior partition to reduce the cooling compartment**

It is a good practice for the distribution business, where possible, to reduce the compartment to be cooled as it is delivered.

- **Synchronizing the SmartOpen-C closure with the tailgate**

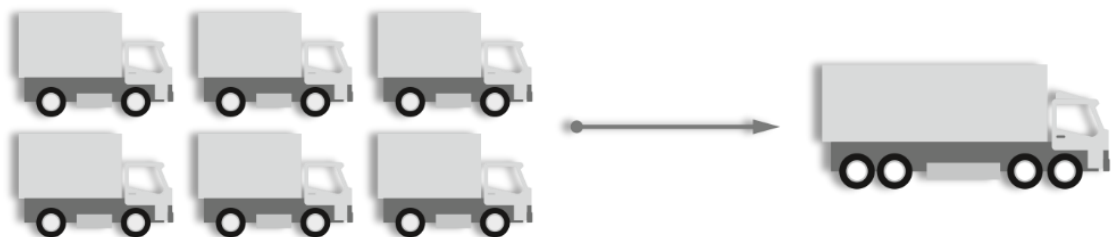
The synchronization in the case of a multiplexed vehicle of the CHEREAU Next range, allows the SmartOpen-C to be closed automatically when the tailgate is lowered and thus avoids the loss of cold from a vehicle that would remain open.

- **Semi-trailer CHEREAU City Trailer = 6 VUL 3T5 12m3**

A CityTrailer is a semi-trailer with a directional rear axle, which gives it excellent maneuverability in urban areas.

It is therefore an ideal tool for massifying logistics flows.

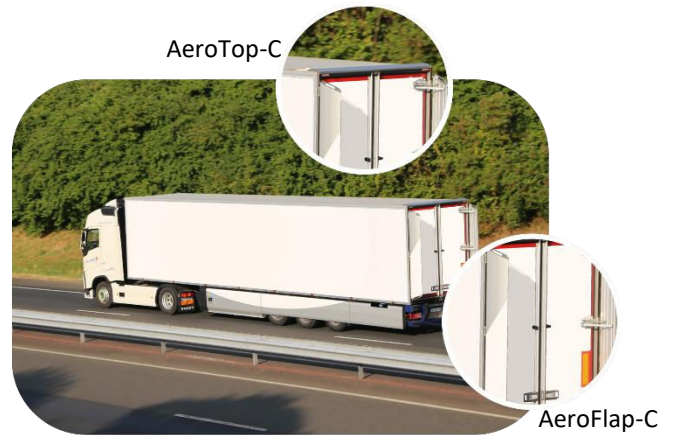
It has a useful volume approximately 6 times greater than that of a 3T5 light commercial vehicle for a pallet capacity multiplied by 8 and a payload more than 30 times greater. All this for a consumption only 2.5 times higher than that of a 3T5 light commercial vehicle.



AERODYNAMICS

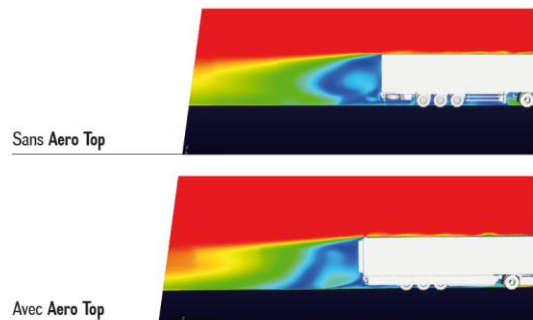
The Aero-C aerodynamic kit reduces the energy consumption of the tractor thanks to the semi-trailer.

It is composed of two dissociable elements, made of aluminum.



- **The AeroTop-C**

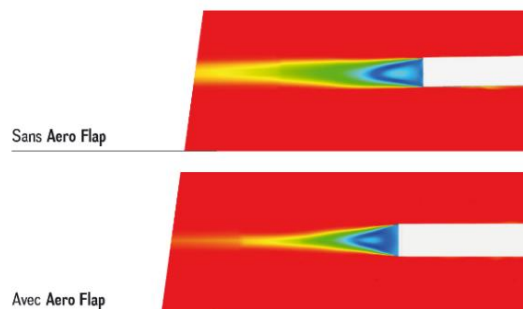
The AeroTop-C is a 50mm high roof spoiler that reduces aerodynamic drag and saves up to **0.3L/100km**.



- **The AeroFlap-C**

The AeroFlap-C is integrated into the rear door template and folds automatically when the doors are opened.

It saves up to **0.7L/100 km**.



The combination of AeroTop-C and AeroFlap-C allows a gain of up to 1.2L/100 km.

For the time being, we have postponed the development of the AeroSkirt-C because there is little demand from customers and there is already a saving of 0.5L/100 by fitting a CHEREAU pallet box.





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CHEREAU PERFORMANCE RANGE

This new line offers the highest level of performance with VIP insulation technology.

The VIP technology for "Vacuum Insulated Panel", based on vacuum (the best insulator there is), makes it possible to achieve a record level of insulation performance. Indeed, a semi-trailer equipped with a longitudinal and vertical ATD-C rail system obtains a record K coefficient of 0.27 instead of 0.36 with the classic CHEREAU range.

This range offers many advantages: an insulation up to 25% more efficient with a decrease in energy required for cold production exactly proportional to the increase in insulation, a capacity to maintain the temperature in case of problem on the group, for example in case of fuel failure which is the first cause of temperature disputes, a time of temperature recovery also proportional to the insulation level.

For example, a cold load at +2°C with the unit switched off would take 3 hours and 20 minutes to reach +7°C in an INOGAM EVO semi-trailer, which is already a reference on the market, and 11 hours and 20 minutes in a CHEREAU Performance version, i.e. 8 additional hours of protection.

Another important point is that the unit is less stressed and the bodywork is better insulated, which should logically increase the vehicle's resale value.

In addition to this starting value, we have enough experience through previous prototypes to qualify the aging of this type of bodywork with a very limited loss of efficiency over time.

CHEREAU Performance offers a new reference in terms of sustainable performance.

Pre-industrialization of VIP insulation is underway, with some 15 vehicles due to leave our plants in 2022 and 50 in 2023. The CHEREAU Performance offer will be launched in series in 2024/2025 with a target of 1000 vehicles equipped with vacuum insulation.

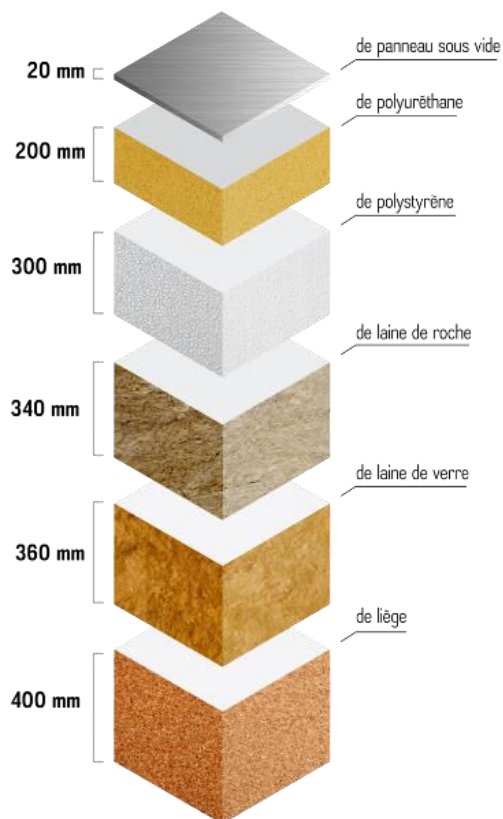


Materialization of the VIP panels (in black) in the bodywork



* For a semi-trailer equipped with a recessed longitudinal and vertical rail

Thicknesses required to obtain the same level of insulation with different materials



■ BETTER CONSUMPTION

NEW ENERGIES TO PRESERVE THE ENVIRONMENT

The aim is to offer transporters different energy solutions in order to replace diesel-powered refrigerated semi-trailers with more environmentally friendly vehicles.

While the energy transition is now a matter of course, the choice for a carrier of the type of solution to replace diesel is not yet.

Thus, we have presented at Solutrans 2021 different solutions that will have to be qualified by the carriers according to their type of activity.

We do not believe that there is a single solution, but that there are different solutions for different types of use.

CHEREAU's proposed solutions:

- Semi-trailer with electric group powered by rechargeable battery, with or without solar panels
- Semi-trailer with electric unit powered by rechargeable battery and energy recovery axle, with or without solar panels
- CHEREAU Hydrogen Power H2 semi-trailer with power unit powered by rechargeable battery and hydrogen fuel cell system

To qualify the different solutions according to the type of customer activity, we have set up a fleet of demonstration vehicles.

Each customer can test the solutions according to his different operating needs and select the optimal solution for each of his needs.



DEPLOYMENT OF OUR SOLUTIONS FOR BETTER CONSUMPTION

- Hydrogen semi-trailer
- CityTrailer E-Axle semi-trailer
- E-Axle long distance semi-trailer + solar panels

In addition to the above vehicles, which for the record were presented at Solutrans, we are aware that for a massive and rapid adoption of these solutions, our demonstration fleet will be insufficient.

We have therefore appealed to the Ministry of Ecological Transition with a proposal to set up a fleet of about twenty vehicles, or even more, depending on the available funding.

To date, we have had no response from the public authorities and aid for new energy vehicles is still limited to tractors and carriers.





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CHEREAU HYDROGEN POWER H2



CHEREAU believes in hydrogen as a clean energy source for the future.

We are actively preparing the industrialization through the new CHEREAU Hydrogen Power H2 range.

In 2022, we will launch two pre-production vehicles. Others will follow in 2023 before the launch of industrialization in 2024/2025. Within 10 years, we would like to increase our vehicle production to 20 to 25% with this technology.

How does hydrogen work?

Green or low-carbon hydrogen is produced from water. Thanks to the electrolysis process which uses electricity, H₂O water is transformed into H₂ and O₂. The resulting dihydrogen gas is a storable energy source. It can then in turn produce electricity through a fuel cell. The cell, from the hydrogen in the tank and the oxygen in the air, will produce electricity, a little heat and reject water vapor.

CHEREAU Hydrogen Power H2 vehicles are equipped with hydrogen tanks, located in the chassis between the side rails, a fuel cell and buffer batteries. The vehicles are designed for at least two days of long distance autonomy and one day of distribution. It takes only 10 minutes to fill up.

Some may say that this solution is ahead of its time, because it is not mature, that there is no network yet, that it is still too expensive.... This is one point of view. CHEREAU's point of view is to do everything possible to help the hydrogen industry to have tangible examples, so that this solution can be

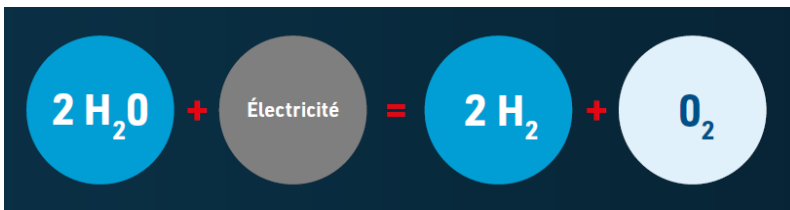


democratized as quickly as possible. Waiting is slowing down the energy transition. Our role as market leader is to maintain this pioneering attitude, by fully assuming this market transformation. The first vehicles are more expensive than the future target price; but the price of hydrogen will inevitably fall, and there will also be more stations. Energy transition is not an option for CHEREAU. It is a necessity, well understood by the transporters who have already reserved our pre-production vehicles.

HYDROGEN: HOW DOES IT ÇA WORK?

ELECTROLYZER

Hydrogen production from water



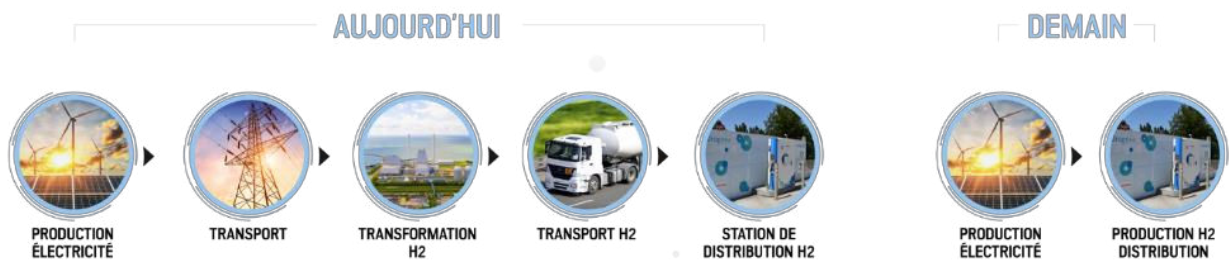
FUEL CELL

Production of electricity from hydrogen



Diagram of how the hydrogen industry works

NEW ENERGY VEHICLE





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This vehicle can be powered in three different ways: on the mains thanks to a 380 volt socket, or by a battery pack. The battery pack can be recharged by an energy recovery axle (E-Axle 24 Kw) or by the roof, which is entirely covered with solar panels (27 m²).

The body is equipped with VIP insulation (Vacuum Insulated Panels), the best insulation available and it can save up to 25% of energy to the refrigeration unit.

Multiplexed, this vehicle is also equipped with the CHEREAU aerodynamic kit: the AeroTop-C which allows to save up to 0,3L/100 km and the AeroFlap-C allowing to save 0,7L/100 km or 1,1L/100 km when these two appendices are coupled.

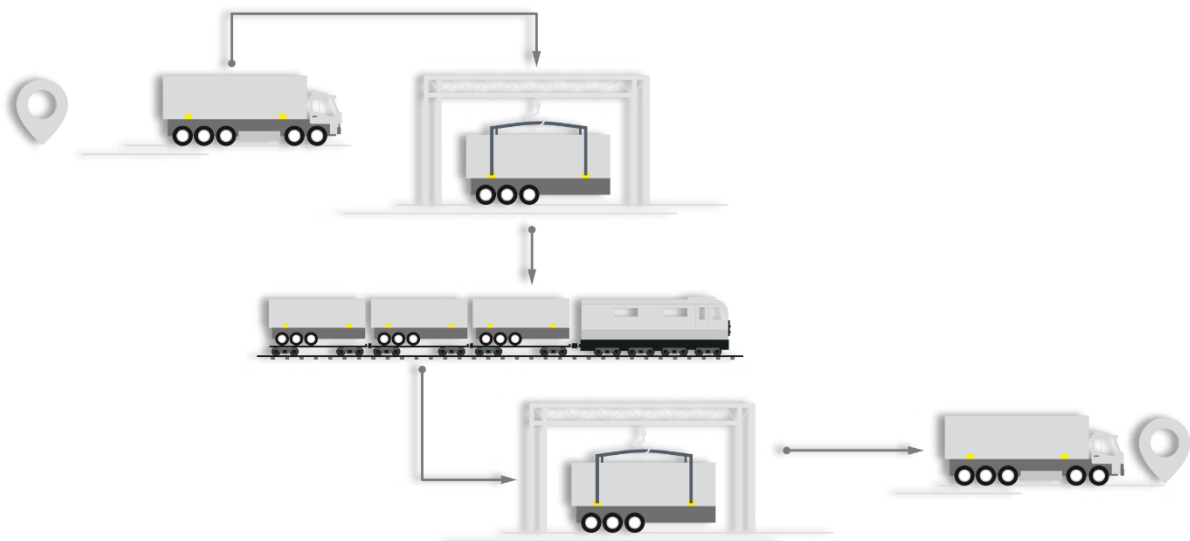


HUCKEPACK

This rail-road transport solution, also known as piggybacking, makes it possible to load the complete semi-trailer (chassis + body) on the train. This limits the number of vehicles on the road and this massification allows significant savings of CO² (up to 9 times less than by road).

This is a solution commonly used in some European countries, particularly in Italy, and which will eventually replace in France the old MobilRail-C type solutions, i.e. a body detached from its chassis and with the chassis remaining in place, this solution therefore provides more flexibility.

The HuckePack semi-trailer is specially equipped with a gripping system that allows the gantry or reach staker clamps to place it on a pocket wagon, a wagon specific to this type of transport.



■ BETTER PROTECT

THE HUMAN BEING AT THE HEART OF ALL OUR ATTENTIONS

We have always thought about the users when developing our products and our goal is that they really enjoy working with CHEREAU products.

This objective is all the more important today because in all European countries, carriers are suffering from a lack of drivers. We are therefore trying to provide the most appropriate solutions in order to limit the risks and constraints and to preserve the attractiveness of the profession for users.

SAFELoading-C

SafeLoading-C is a patented system that automatically locks the vehicle's brakes at the dock when the dock door is opened.



In concrete terms, the vehicle and the platform are equipped with a communicating box.

When the dock door opens, the information is shared with the vehicle via a wireless connection.

The vehicle's brakes are automatically locked by activating the parking brake when the vehicle receives the signal.

When the vehicle is secured, a blue light, located on the inside right side or on the dock, lights up to inform the dock operator. The driver also receives the information via a light on the front of the vehicle or directly on the dashboard.

As soon as the dock door closes, the safety device is released and allows the vehicle to leave the loading dock.

This allows the dock operators to work in complete safety.



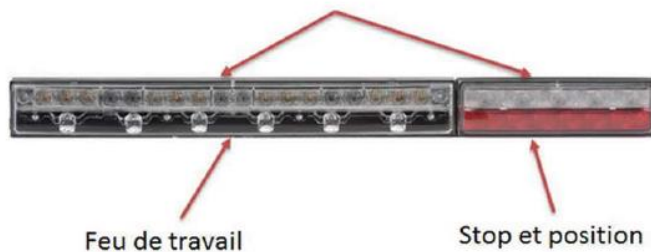
LIGHTING SOLUTIONS

In order to ensure the safety of delivery drivers during night deliveries, CHEREAU offers various lighting solutions:

- Citylight, rear lighting
- Sidelight, side lighting
- SL60, tailgate lighting

CITYLIGHT

The CityLight is a multifunctional lighting system that is particularly relevant for street deliveries. It combines scrolling directional and hazard lights, position and stop lights, and a powerful work light. This is automatically triggered when the liftgate is turned on.



SIDELIGHT

The SideLight is a safety side light consisting of six lights for trailers and four to six lights for rigids. This light, which operates via a switch in the cab, is only allowed when the vehicle is stationary, regardless of the country.



SL60

The SL60 is a special light that illuminates the tailgate area.

STEP WITH RAMP





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To secure the access to the vehicle and avoid accidents such as falls from height, we offer a ramp that folds automatically without any additional action or effort for the driver.

Two models exist:

- A narrow model for wearers
- A wide model for semi-trailers





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SMARTOPEN-C EVO

The distribution business requires equipment adapted to its specificities, the challenge is therefore to allow longer rounds while respecting the cold chain from start to finish. It is also important to provide safe and ergonomic solutions for delivery drivers to facilitate their work while reducing noise and CO2 emissions.

SmartOpen-C Evo is a patented, fast, electric rear opening system. It closes the body in less than ten seconds, protecting the goods being transported and allowing longer tours. It benefits from a high level of insulation and reduced maintenance. Its opening, above the body, allows the installation of all the interior equipment essential to urban delivery and improves hygiene. SmartOpen-C Evo is PIEK compliant for night deliveries.

The SmartOpen-C Evo is the ideal tool for urban distribution under controlled temperatures.

BENEFITS:

PRACTICE

- Free pavilion
- Optimized passage width
- Compatible with longitudinal partitions

PROTECTOR

- Enhanced hygiene
- Anti-clogging system
- Anti-pinch system
- Low-noise motorization
- No extra space (width) when maneuvering at the dock

PERFORMANT

- Open/close in less than 10 seconds
- Extended distribution rounds
- Opening/closing from the platform

PRODUCTIVE

- Useful length (+50mm)
- Width of passage (2400mm)
- Low maintenance
- With CHEREAU Next: Automated opening/closing with the tailgate

To learn more, find the product sheet [here](#).



■ **BETTER USE**

CUSTOMIZED SUPPORT AT YOUR SERVICE

DAAS

DaaS for "Data as a Service" is a CHEREAU project in partnership with visible.digital. It aims to bring more added value to our customers and our customers' customers through the exploitation of vehicle data.

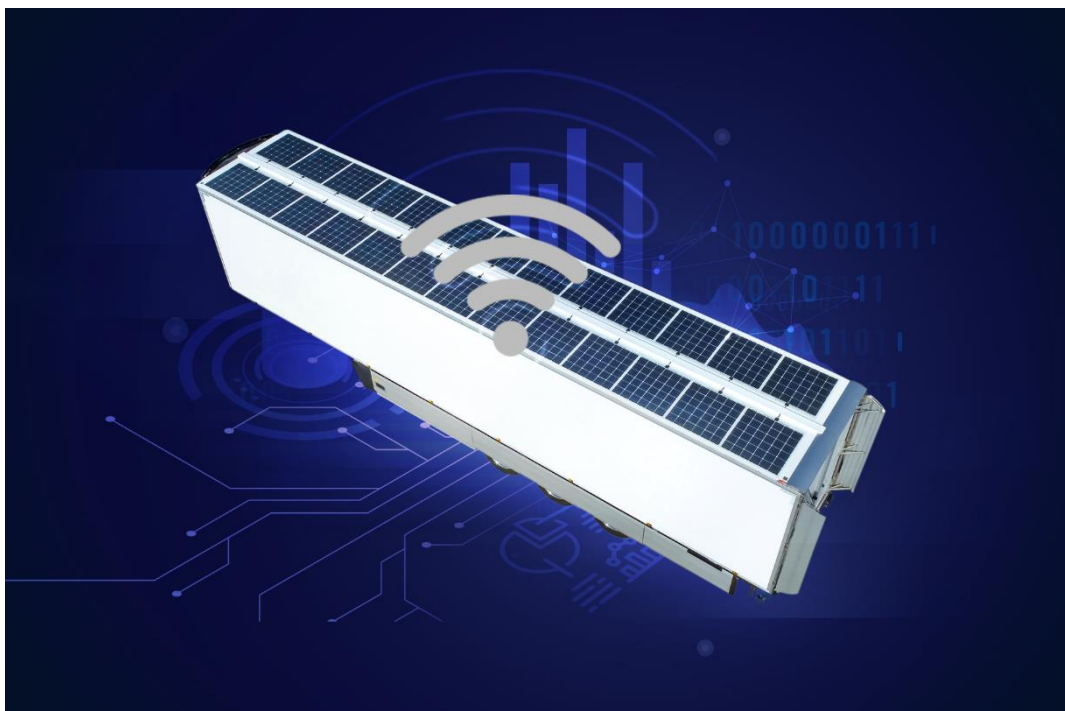
In concrete terms, this means using the data to extract relevant information for users.

Example: if I know the geographical position of the vehicle and the state of the rear door (open or closed), I can send an alert to the operator in case the door is opened outside the planned delivery location.

All the data from the CHEREAU semi-trailers will be available to all the telematicians in the market, for a fixed fee per vehicle.

CHEREAU is the first bodybuilder to equip all of its trailers with an open data system for use by all telematicians on the market.

This leaves clients free to work with the telematician of their choice, which is quite unique.



Wherever CHEREAU equipment is used, we have to support our customers so that their equipment is always operational.

OUR NETWORK

CHEREAU wishes to have an effective technical presence with its customers to accompany them in the operation of their vehicles. CHEREAU vehicles are references and the transport customers have professional constraints which prohibit the approximation.

CHEREAU has therefore chosen to pay particular attention to the densification and competence of its network of Service Points.

The network of CHEREAU Service Points is growing every year. Today, there are **nearly 100 service points in 22 countries:**

- **44 service points in France**
- **7 service points in Germany**
- **16 service points in the UK**
- **8 service points in Spain**
- **4 service points in Poland**
- **2 service points in Sweden**
- **15 service points in other countries**





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TECHNICAL SUPPORT

For nearly 70 years, CHEREAU has been recognized for the high quality and performance of its products. However, the natural requirement of our customers sometimes leads us to improve certain solutions. A dedicated team is at the disposal of the users to collect their possible remarks and requests.

Our services accompany them on :

- Troubleshooting
- Technical information
- The diagrams
- Technical management of after-sales training
- Technical expertise

CHEREAU TRAINING

In order to guarantee the best level of maintenance and service for our customers' equipment, we offer various training courses to our CHEREAU Service Points and to our customers with an integrated workshop: a general training course for the maintenance and servicing of equipment and, depending on their needs, two specific training courses dedicated to SmartOpen-C and multiplexing





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THE ORIGINAL CHEREAU SPARE PART

CHEREAU offers a wide range of guaranteed original spare parts.

The CHEREAU guaranteed original part, it's more than 4 000 references with the CHEREAU quality aiming at preserving the performances and the resale value of the materials.

All parts for CHEREAU vehicles (including tailgate, group, axles...) are available from our warehouse. They can be shipped everywhere in France and abroad. Some parts require longer manufacturing and supply times, so shipping times will be evaluated on a case by case basis.

The CHEREAU guaranteed original parts online catalog offers the essential spare parts with photograph, weight, price (on request), detailed assembly plan and indicative delivery time.

Access to the [Easy Parts](#) catalog | [CHEREAU](#)





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CHEREAU, A PIONEER IN THE HYDROGEN INDUSTRY

NEWS FROM ENERGY OBSERVER

Our partner Energy Observer continues its three-year Odyssey across the seas of the world to discover the ecosystems, the actors and the energies that make the richness of our planet. After 17 days at sea from Lombok in Indonesia, the crew arrived on March 10th in Singapore to moor alongside the Energy Observer village in the One°15 marina. On the program an eventful stopover until March 20, gathering the exhibition village and the ship for the first time since October 2019!

This stopover was a real opportunity to mobilize as many maritime transport and energy players as possible, and allowed us to hold multiple events within our traveling exhibition. It was also an opportunity to raise awareness among young people (French school in Singapore) and for our partners to welcome customers and employees on board to give them a unique experience.

About Energy Observer

The Energy Observer project was born in 2013 from the commitment of Victorien Erussard, merchant marine officer and ocean racer. Aware that it is vital to commit to the planet, he gathered around him a team of complementary professionals, sailors, scientists, engineers and reporters, in order to create the first autonomous ship capable of drawing its energy from nature while preserving it.



The dream became reality 4 years later, when the Energy Observer vessel was launched for the first time. Developed from a legendary racing catamaran, Energy Observer is a laboratory of ecological transition designed to push the limits of zero-emission technologies. Hydrogen, solar, wind, tidal, all solutions are experimented, tested and optimized to make clean energy a concrete reality accessible to all.

Criss-crossing the seas to meet those who find sustainable solutions for the planet every day, Energy Observer has become a movement, an Odyssey around the world where each stopover is an opportunity to learn, understand and share the energies of others.

Energy Observer has received the High Patronage of Mr. Emmanuel Macron, President of the French Republic. First French ambassador of the 17 UN Sustainable Development Goals, it has the official support of the Ministry of Ecological Transition, UNESCO, the European Union, Irena and Ademe.





KEY FIGURES 2021

- Nearly **1000 employees**
- **203 million €** in sales
- **49%** of export sales
- **More than 3600** vehicles produced
- **49%** market share in France
- **15%** market share in Europe
- **5.1 M€** of investments in the production tool
- **3.3 M€** of fundamental and customized R&D

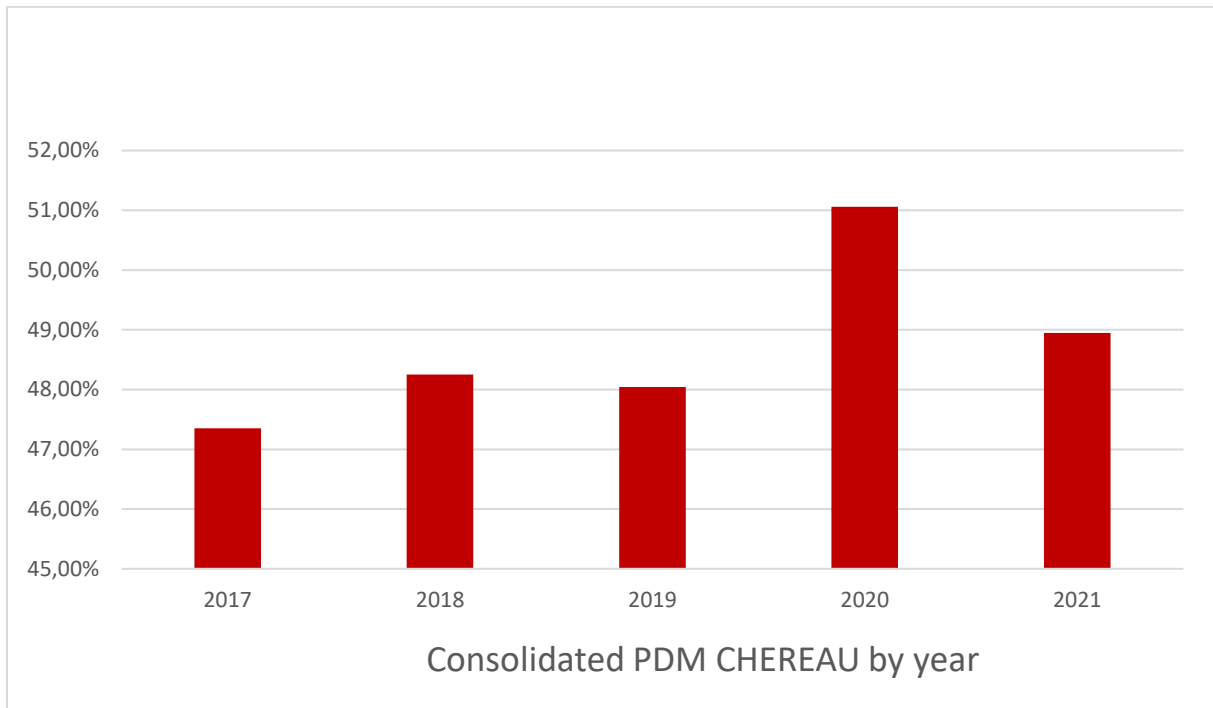




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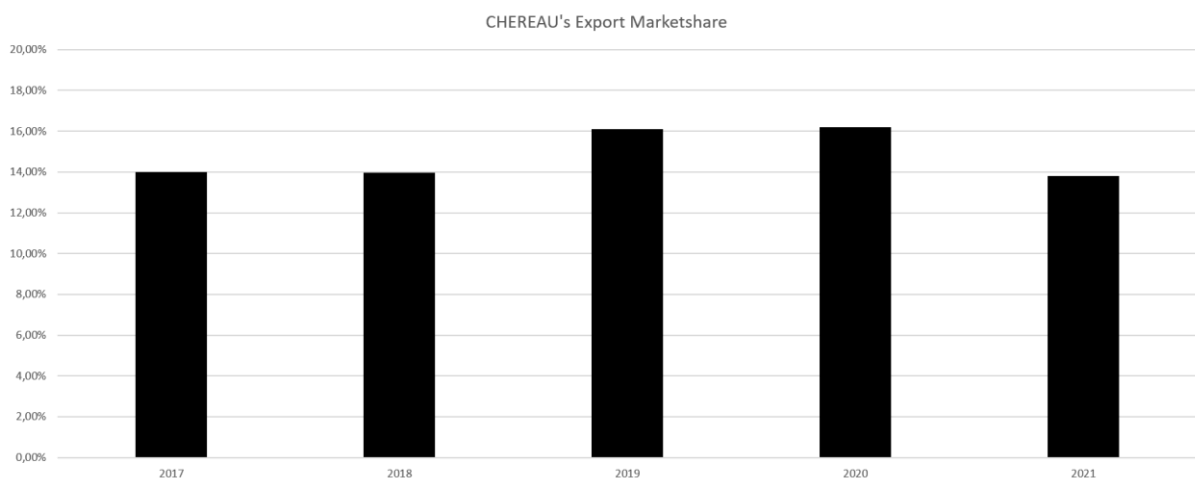
■ CHEREAU MARKET SHARE IN FRANCE

EVOLUTION OF CHEREAU'S MARKET SHARE IN FRANCE



An undisputed leadership with nearly one out of two refrigerated semi-trailers in France every year. Thank you to our customers!

EVOLUTION OF CHEREAU'S EXPORT MARKET SHARE





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■ CHEREAU AND CSR

In 2022, we will release the CSR report on June 11, during a day dedicated to our employees and their families.

■ FIND US ON

The website : www.chereau.com

Social networks:



<https://www.linkedin.com/company/ets-jean-chereau-sas/>



https://www.instagram.com/chereau_sas/



<https://www.youtube.com/channel/UCWGhPcuPcW4hpnqHx4S1hFQ>

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