



ZERO EMISSION REFRIGERATED TRAILER

With the e-reefer, we pave the way to achieving net zero carbon emissions in temperature-controlled transport

LEADER IN EQUIPMENT SERVICES



Why we need the e-reefer



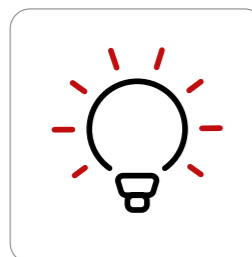
Keeping products at the right temperature is increasingly important



The current diesel-powered reefer solutions are not sustainable



Current diesel price points are high and remain unpredictable for the future



We are launching new concepts with high potential to decrease emission

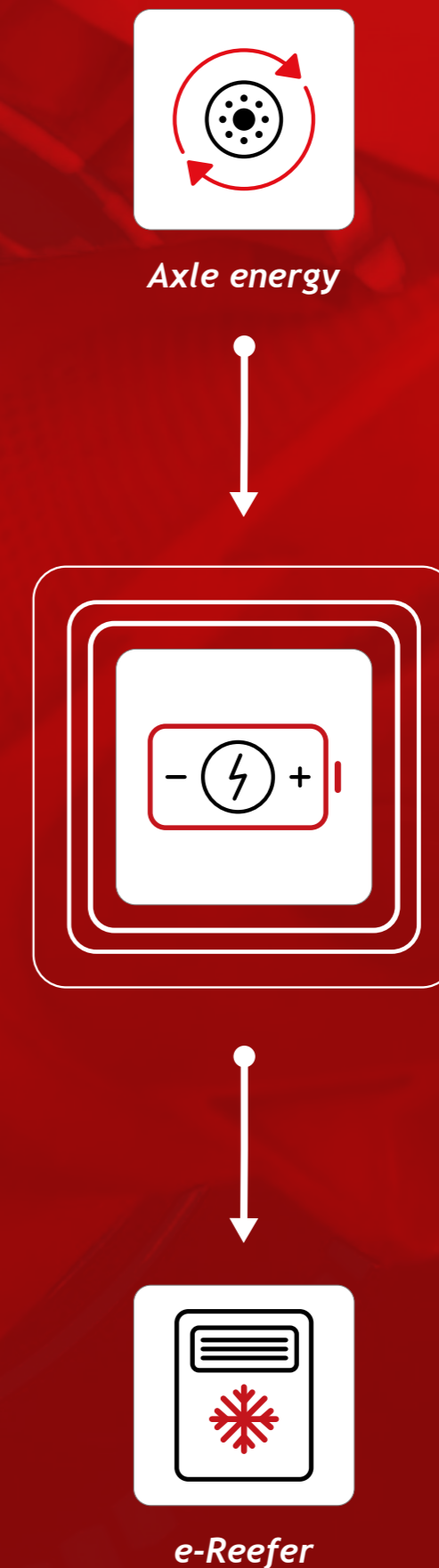
POWERING THE REEFER ENGINE
THROUGH CHARGING THE BATTERY FROM THE NET,

MAKING TEMPERATURE CONTROL

CARBON FREE

Reducing carbon emission while reducing costs is the way forward

- This innovation is electrifying the trailer reefer unit and its engine. To supply the engine with sufficient power, an advanced battery system is mounted to the trailer. The net offers an efficient way to charge the battery and keeps the freight chilled at temperatures down to -25°C
- This new kind of battery is designed to perform the entire duration of the drive. When it needs to be charged, the net is the more cost-effective and user-friendly solution that is easier to integrate in the trailer
- The energy recuperation axle e-reefer converts the kinetic energy from the axle movement into electrical energy, charging the battery while on the move. A self-sustaining solution ideal for city distribution and traffic flows with multiple stops, minimising the need for external power sources.
- CO2 emission savings are directly proportional to energy savings. Each unit saves up to 25 tons of CO2 per year, contributing to the lowering of emissions in the transportation sector



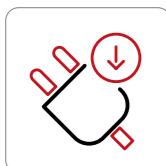
Solution - Energy Recuperation Axle



TCU €€€



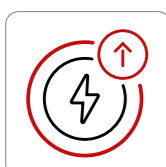
Recovering lost energy



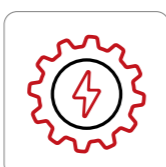
Less dependent on grid



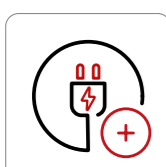
COC Infringement



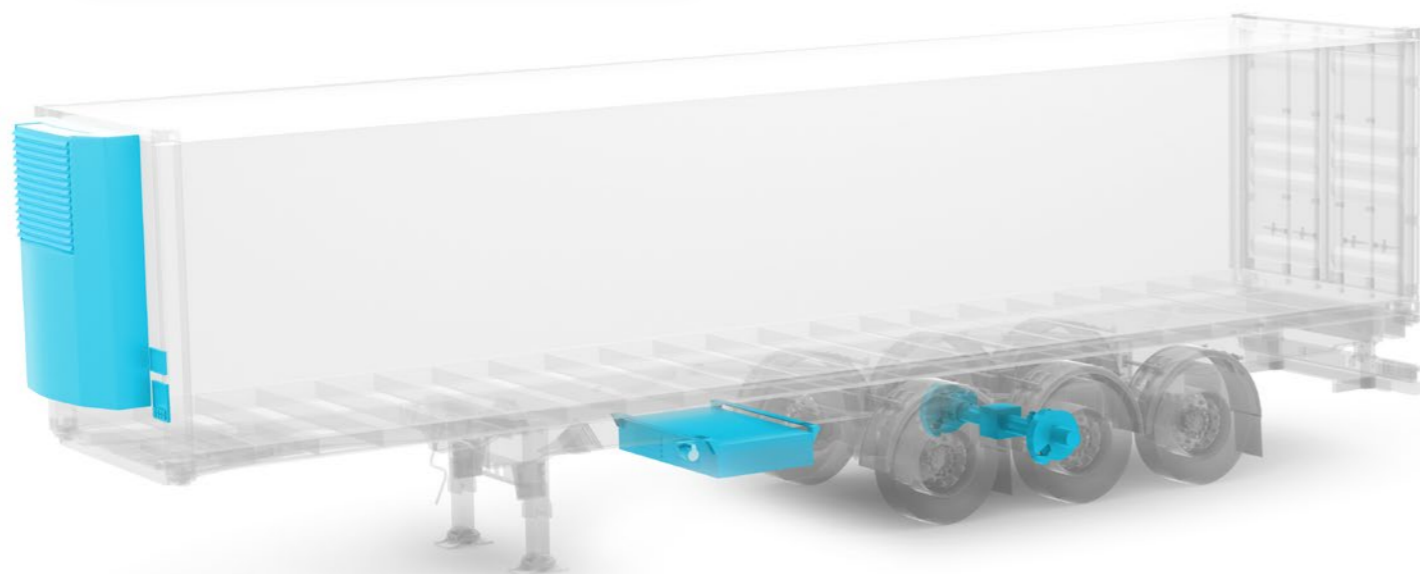
High voltage solutions



Charges while in operation



Extra charging via plugin

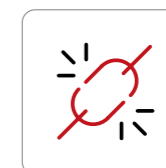


Charging on the grid

Key Attributes



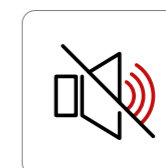
Ability to retrofit



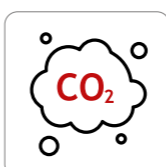
Independent from the truck



Full support from TIP's global network



Significant noise reduction



Accelerate innovations towards zero emission solutions



Simple charging with a standard 3 phase plug system

OUR PROMISE

WE MAKE IT HAPPEN!



We enable our customers to achieve their sustainability, efficiency and safety targets faster and at bigger scale

As industry leaders, we take the responsibility driving the industry towards sustainability to improve the health of our planet.

To accelerate the energy transition, we rethink our traditional way of operating. Innovations are the solution, as they drive changes in our industry, better serve customers and discover new opportunities

At TIP, our ambition is to partner with our customers in the electrification of their cold-chain fleet, to make sure in the nearby future Reefers run entirely on renewable electricity.

TIP will look at which solution suits the best needs of our customers.

