



ADDVOLT®

Building a Smart and Sustainable Transport Worldwide



13% of Food in the World
Is **Lost** Every Year Due to
Lack of Refrigeration.

Source
UNFAO



4.2 Million Deaths/Year
Occur due to Exposure to
Outdoor **Air Pollution.**

Source
World Health Organization (WHO)

4.5 Million

Refrigerated Trucks & Trailers Circulating Worldwide.



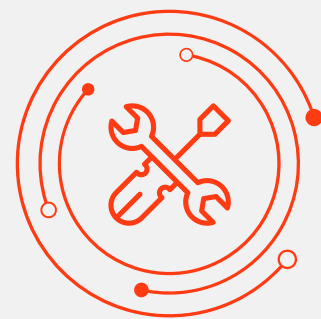
20 Billion
Litres of Diesel/Year



53 Billion
Ton of CO₂/Year



> 60 dB

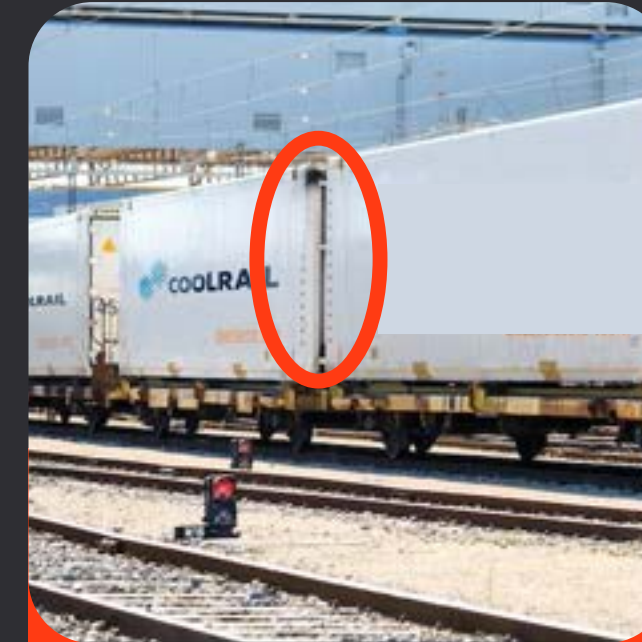


**Maintenance
Costs**

INDUSTRY



VANS



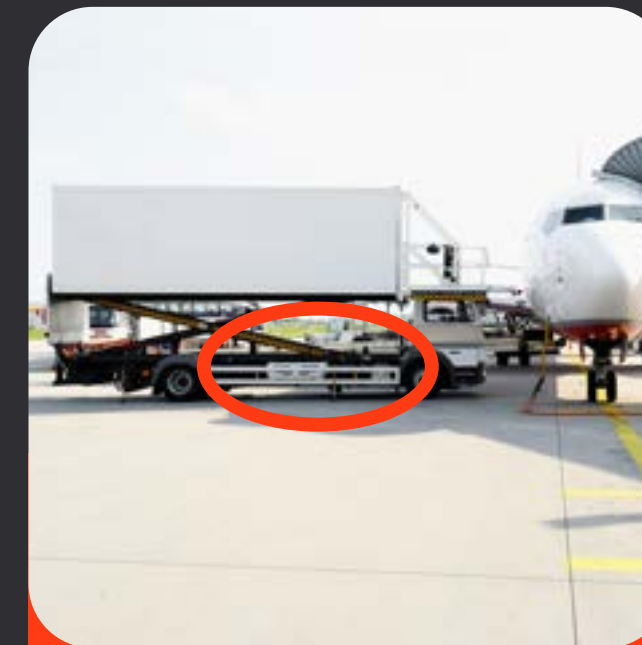
CONTAINERS



TRUCKS



TRAILERS



CATERING TRUCKS



OTHERS

ADDVOLT®

World's First **Plug-In Hybrid**



ADDS****

Up to 7 kWh



ADDM/L****

Up to 19/35 kWh



ADDSlim****

Up to 19 kWh



ADD **Power Unit**

Out. AC Power Up to 19 kW



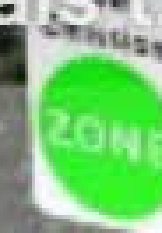


AddVolt | Clean Energy to Transportation



Partilhar

Ver mais...



Eco-friendly



Ver no YouTube

My Addvolt

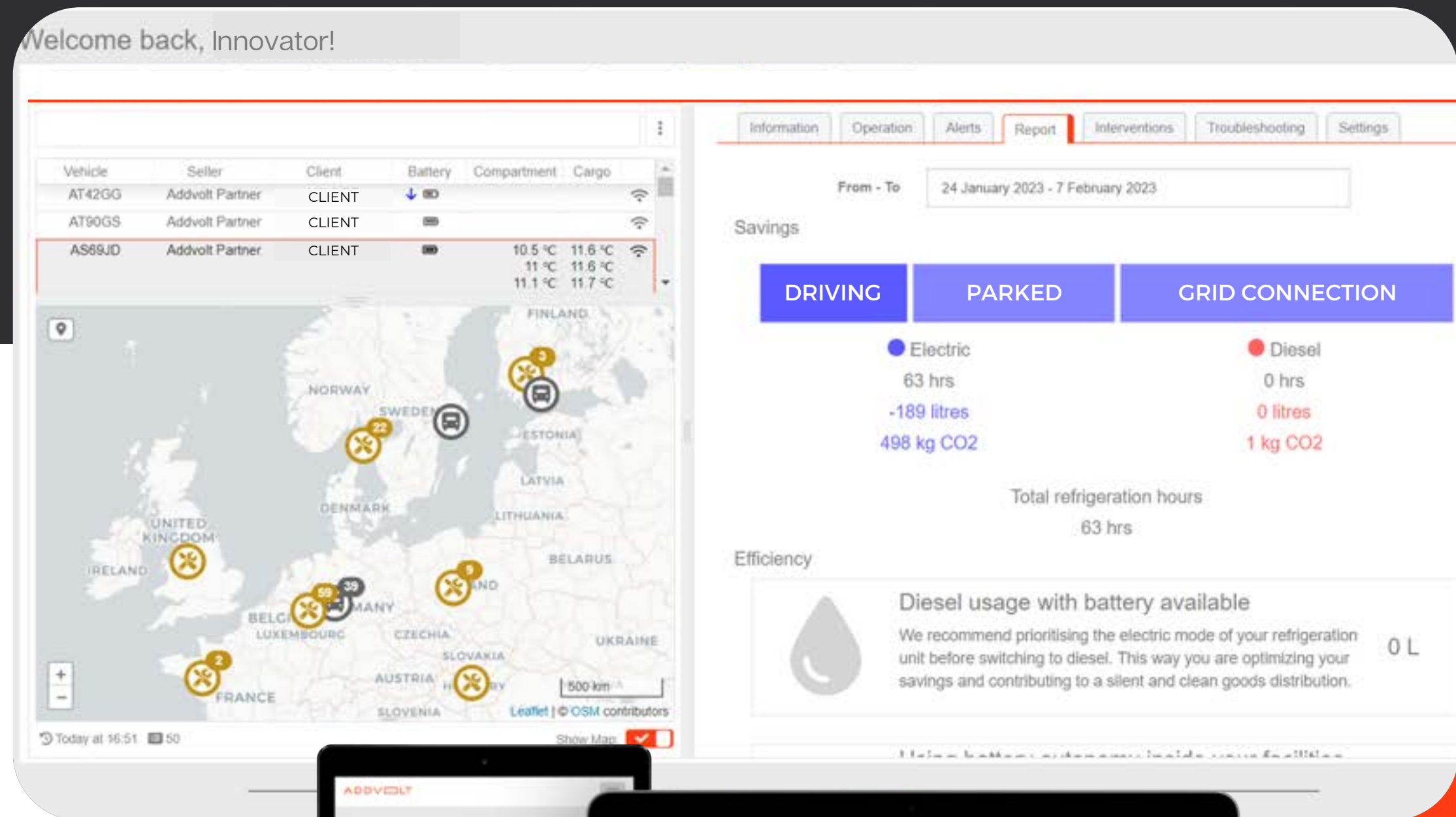
More than a Dashboard.

◆ Energy Management Tool

- Real Time Data Monitoring
- Vehicle and Battery Performance
- Auxiliar Systems Monitoring
- Monitor Carbon Footprint
- Monitor the kWh Consumption and Average Power in kW of the Aux. System
- TCO Analytics
- Smart Charging Regulation

◆ Predictive Support

- Remote Service Assistance
- Remote Maintenance
- Quick system updates
- Battery Warranty Extension





Electric Mode

ON/OFF

Vehicle

Driving/Idle/Parked

Lift

ON/OFF

Grid

Connected

SoC

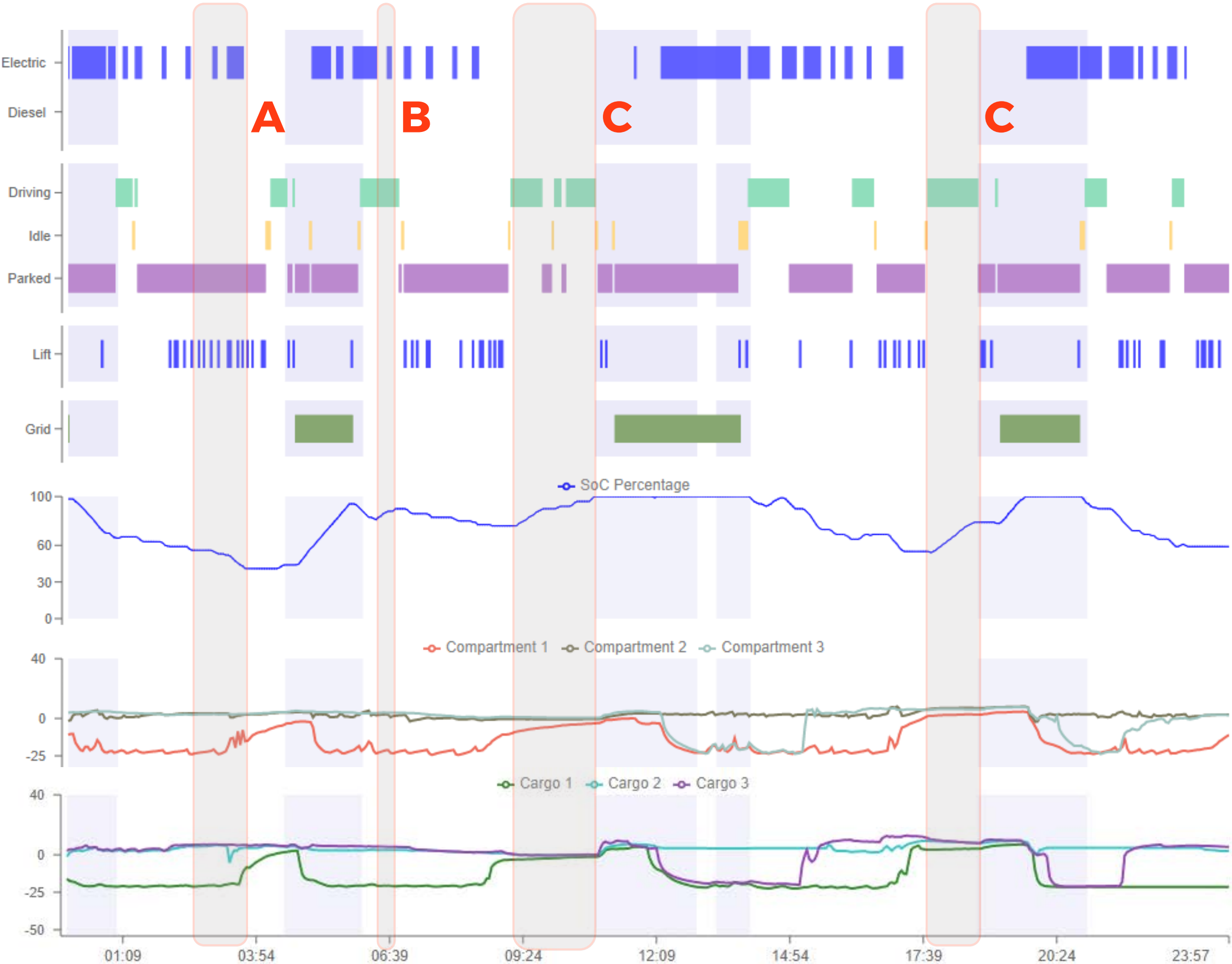
Real Time
State of Charge

Temperature

Compartment 1, 2, 3

Temperature

Cargo 1, 2, 3



- Legend:
- Inside Facilities
 - A** Addvolt Powerpack is powering the reefer and the lift
 - B** Add-Generator is recharging battery and powering reefer
 - C** Add-Generator is recharging battery. Also, when vehicle is returning to facilities, battery recharges up to 100%. Savings in electricity consumption at client facilities.

Addvolt Benefits

Providing Clean Energy for Mobility. Yesterday, Today, Tomorrow.

◆ Clean Energy

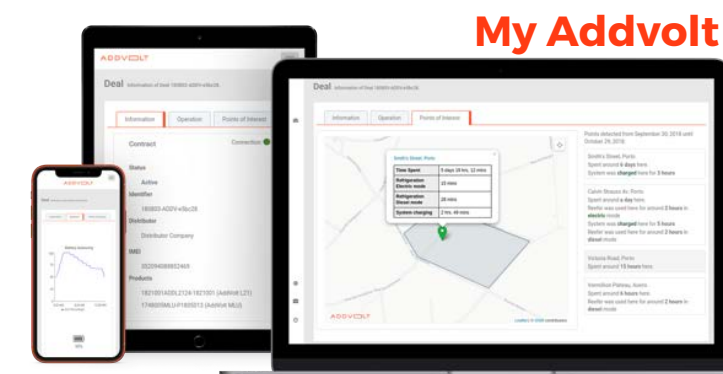
- No CO₂ Emissions
- No Diesel Engine
- Reduced TCO
- For All Vehicle Brands
- Hydrogen, Electric, Hybrid, LNG and Diesel Vehicles

◆ Silent Operation

- 24/7 Inner Cities Access
- Maximize Fleet Usage
- Certified Solution
- Easy to Install
- Non Invasive Solutions
- No Cooling Interruption

◆ Flexibility is the Key

- Simple to Use
- Better Performance
- Smart Energy Management
- Real Time Data Monitoring
- Data Interoperability (API)
- Autonomous Driving





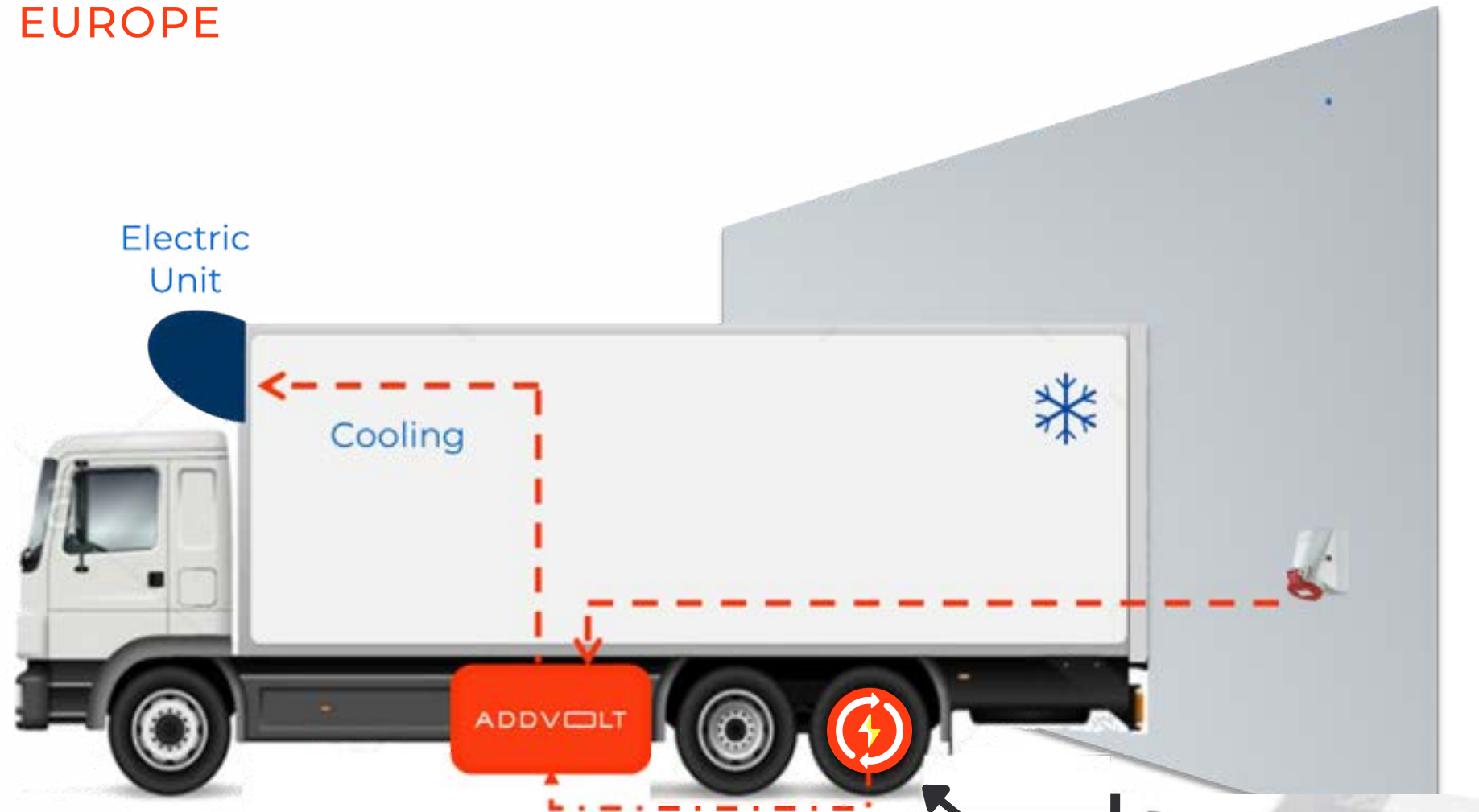
Addvolt's Use Cases

Our Innovators Challenge Us. We Conceive Together.

Use Cases

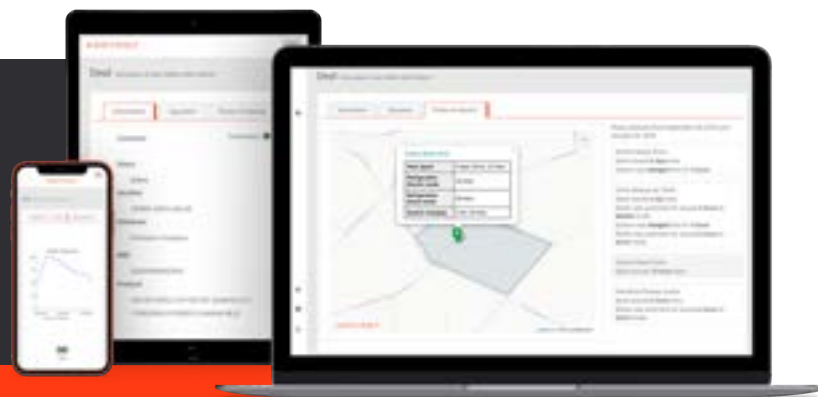
Rigid Truck

EUROPE



ADD Kinetic Kit

 Real-Time Data
Monitoring with
My Addvolt



ADDM

🎯 Purpose

Run in Electric and Silent Mode while Vehicle is Delivering Products at Inner Cities.

📦 Addvolt Solution

Model	ADDM 1219 Hybrid
Power	12 kW
Bat.Cap.	19 kWh
Add-On	Addvolt Generator Kit

❄️ Reefer Unit

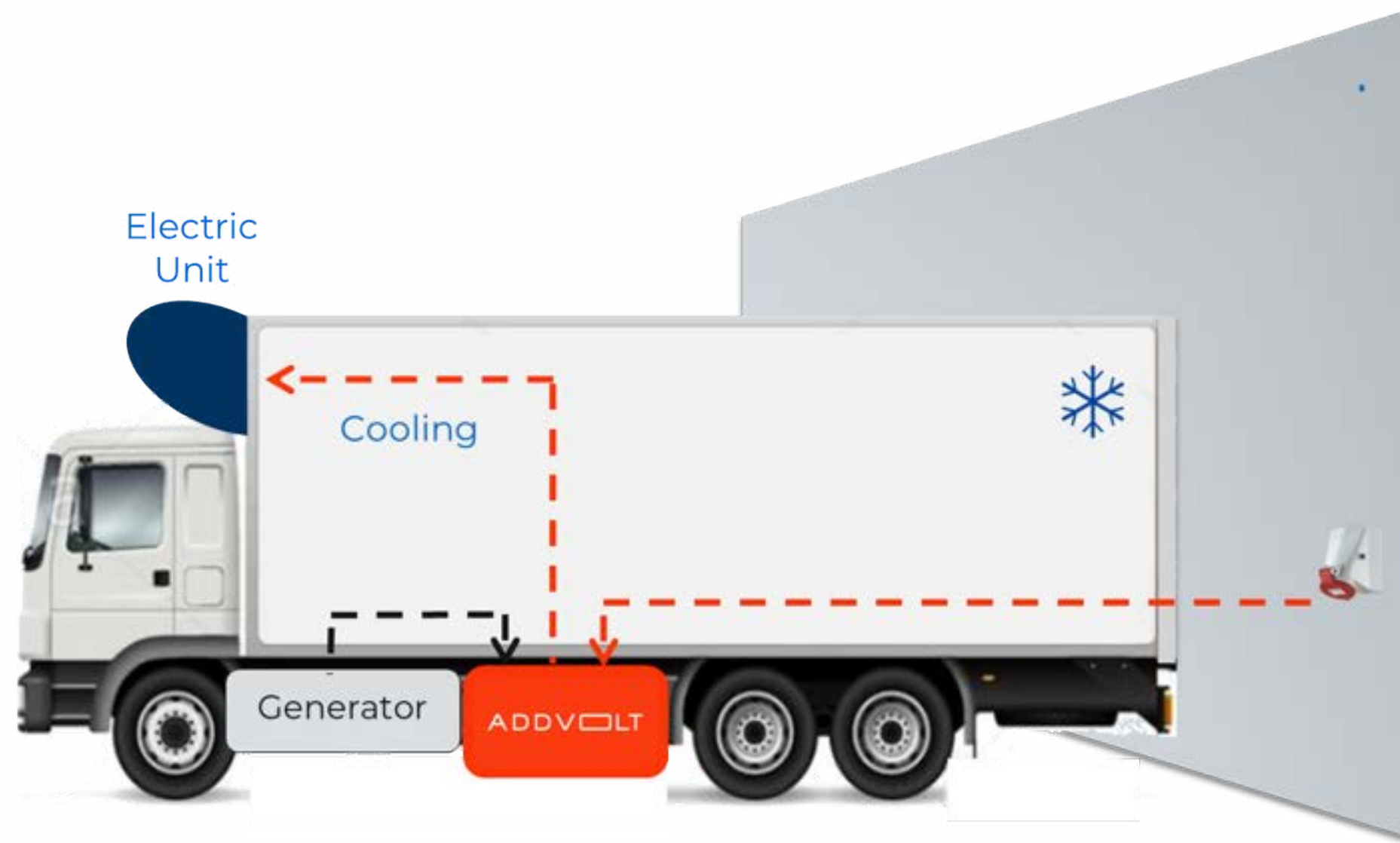
100% Electric
2 Evaporators

✅ Results

- Less noise during night deliveries
- Eliminated 20 Tons of CO₂ emissions per year
- Alternative to engine-alternator

Rigid Truck

EUROPE



Real-Time Data
Monitoring with
My Addvolt



ADDM

Purpose

- Emission-Free Delivery at Inner Cities
- Run Reefer Unit with Truck Engine Off
- Extend Autonomy with Battery Recharging from Truck

Addvolt Solution

Model ADDM 1919
Power 19 kW
Bat.Cap. 19 kWh

Reefer Unit

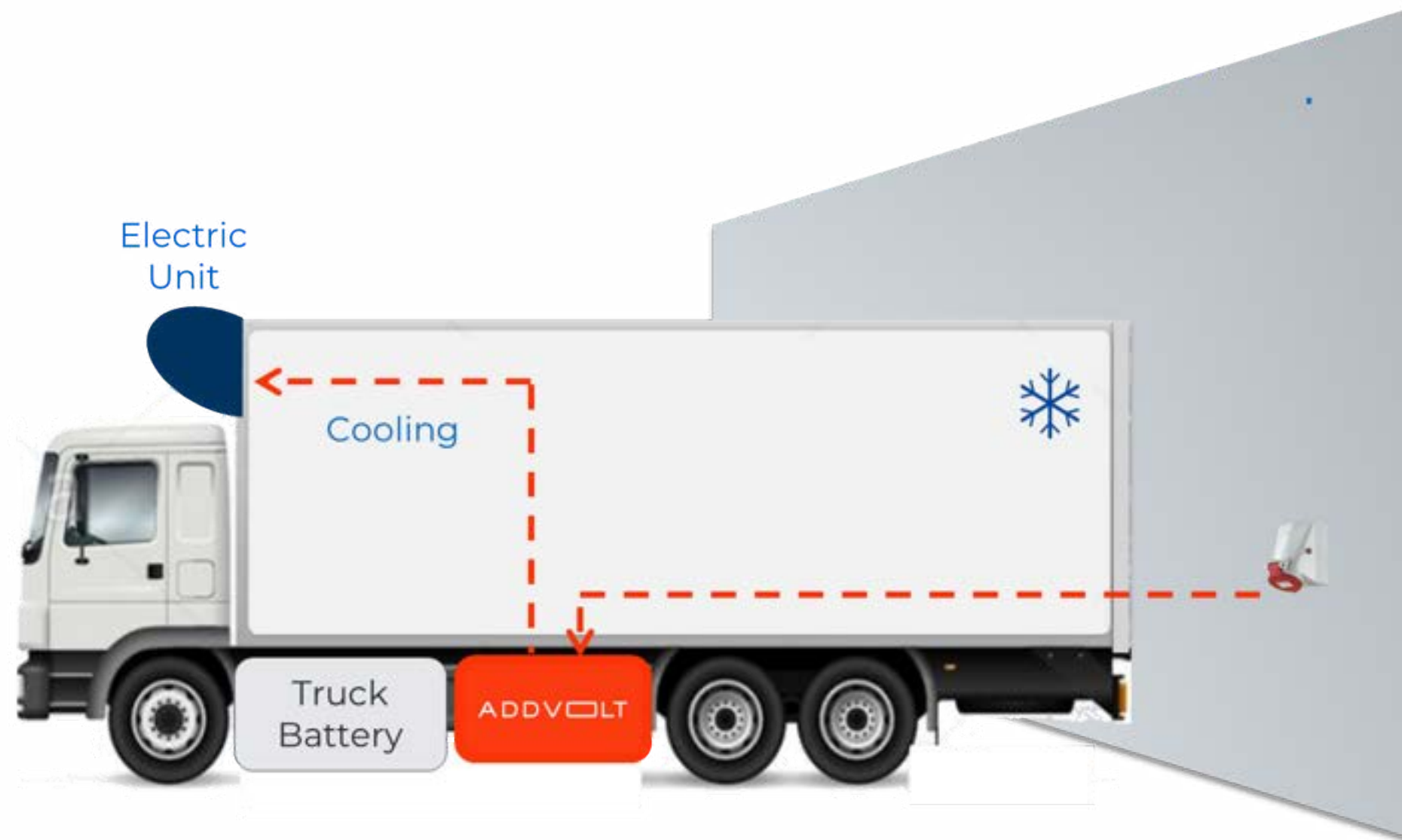
Electric Driven by
Truck's Engine
2 Evaporators

Results

- Battery Charging while Parked in Warehouse
- Independent Electric Cooling at Inner Cities (no need to run diesel engine at delivery points)
- Less Noise from Reefer Unit during Deliveries with also Truck Engine off

Electric Truck

EUROPE



 Real-Time Data
Monitoring with
My Addvolt



ADDL

Purpose

- Emission-Free Delivery at Inner Cities
- Extend the Truck's Battery Capacity
- Extend the Truck's Drive Range in Electric Mode

Addvolt Solution

Model ADDL 1935
Power 19 kW
Bat.Cap. 34.6 kWh

Reefer Unit

100% Electric
2 Evaporators

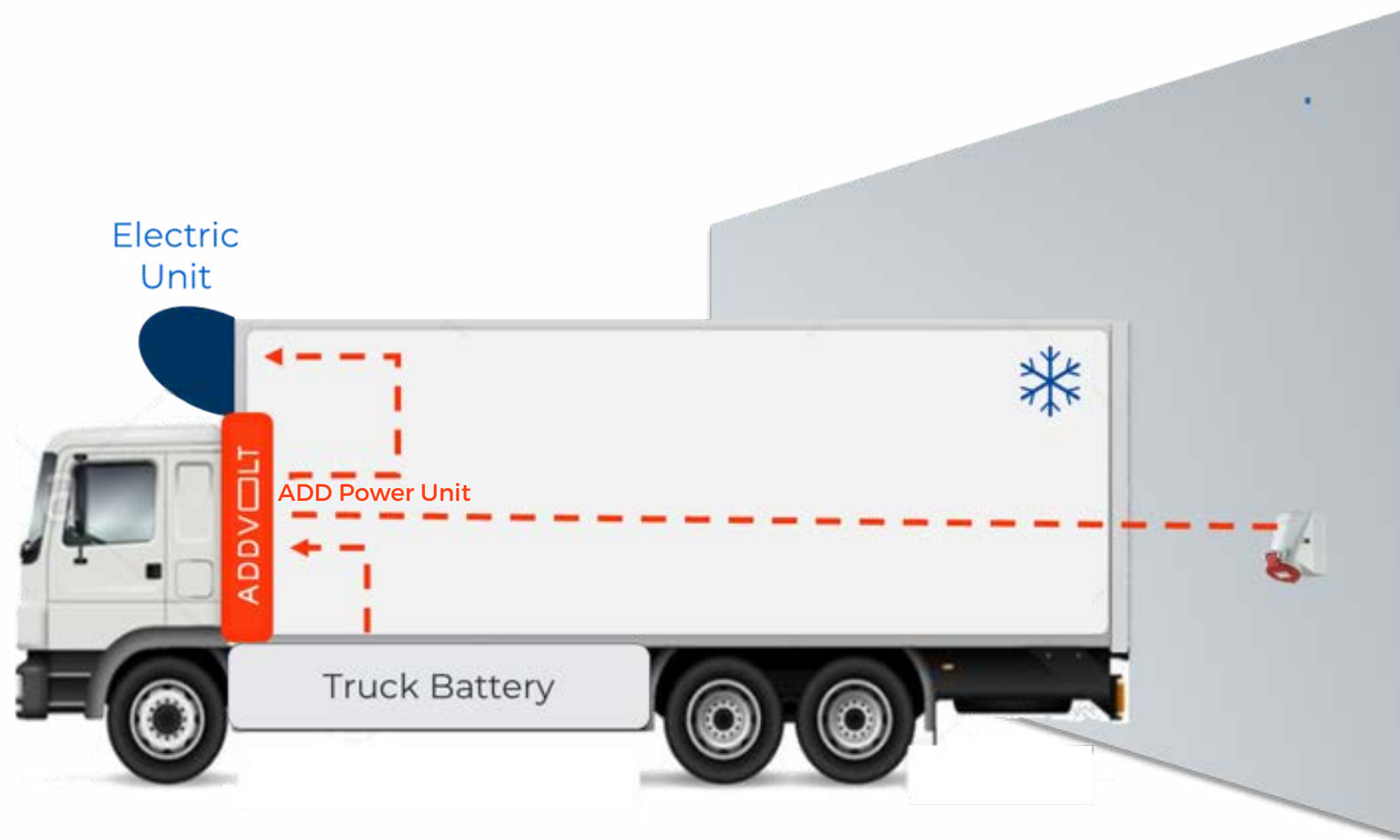
Results

- Diesel Replaced by ADD Powerpack
- Battery Charging while Parked in Warehouse
- Independent Electric Cooling at Inner Cities (no need to charge at delivery points)
- No Noise from Reefer Unit during Deliveries

Use Cases

Electric Truck

EUROPE



Real-Time Data
Monitoring with
My Addvolt



ADD Power Unit



Purpose

- Enable the Connection between any Electric Truck to any of Refrigeration Unit, worldwide.
- Power the Refrigeration Unit from any EV Charger or 3-Phase Standard Plug.

Addvolt Solution

Model ADD Power Unit
Power Up to 19 kW

Reefer Unit

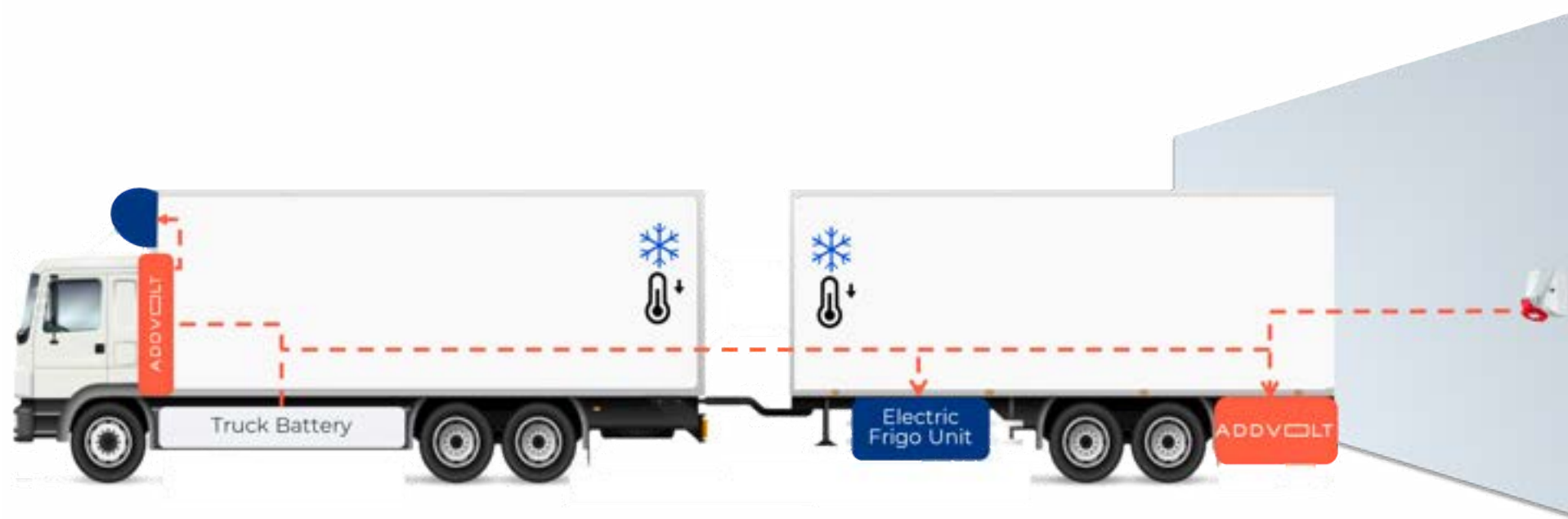
100% Electric

Results

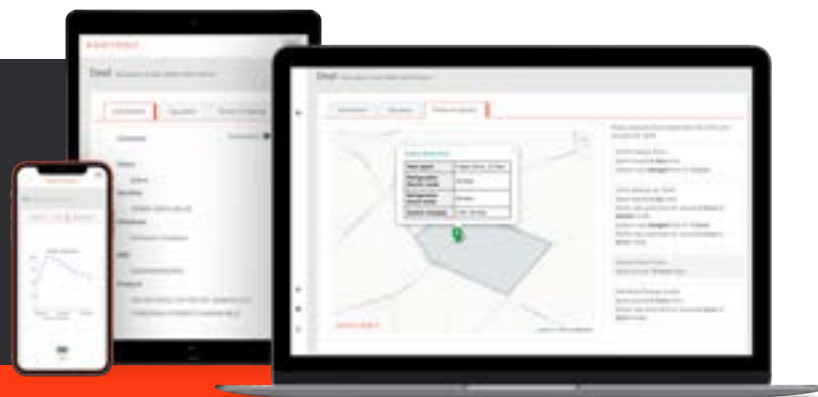
- Improved Performance with Smart Energy Conversion between Any Refrigeration Unit (AC) and Any Electric Truck with High-Voltage Battery (DC)
- 24h Connectivity with Data Monitoring: Energy Consumption, Location and other relevant KPIs
- More Silent and Cleaner Refrigeration during Day/Night Deliveries.

Hybrid Truck + Trailer

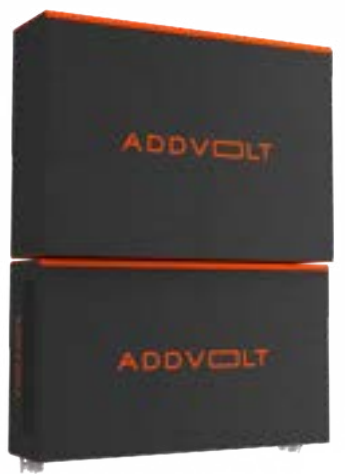
EUROPE



 Real-Time Data
Monitoring with
My Addvolt



ADD Slim



Purpose

- Emission-Free Delivery at Inner Cities
- Extend the Truck's Battery Capacity
- Extend the Truck's Drive Range in Electric Mode

Addvolt Solution

Model ADDM 1919 Slim
Power 19 kW
Bat.Cap. 19.2 kWh

Reefer Unit

100% Electric
2 Evaporators

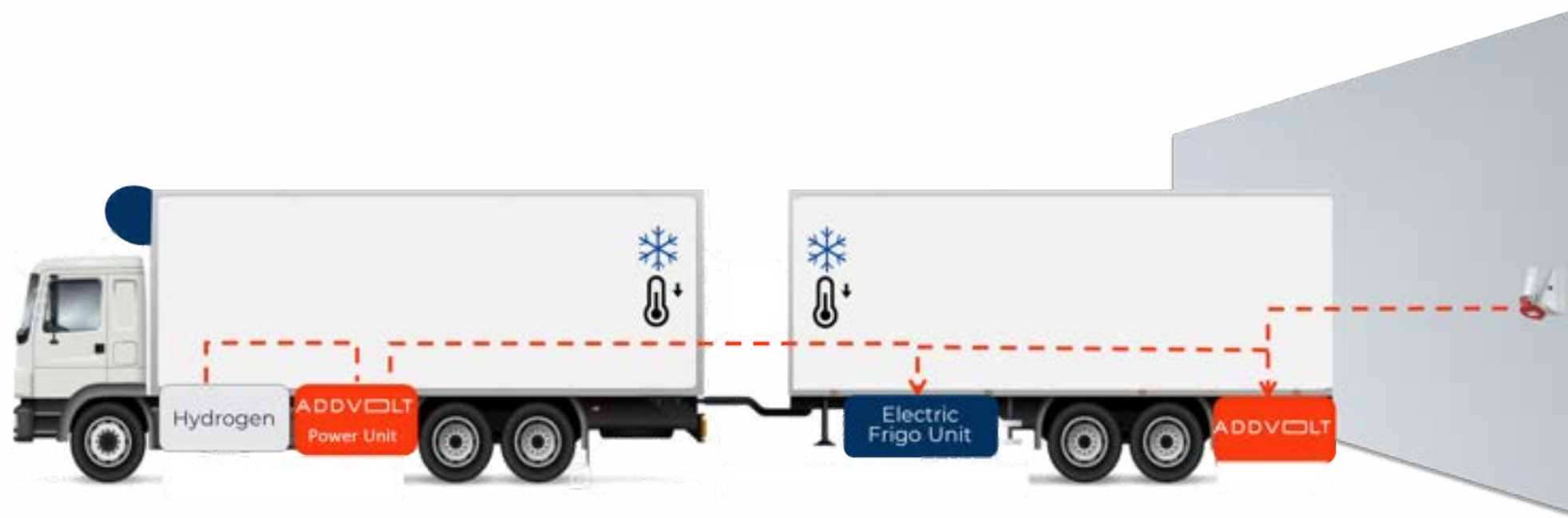
Results

- Diesel Replaced by ADD Powerpack
- Battery on Drawbar and Truck Recharged by the Truck's Generator
- Battery Charging while Parked at Warehouse

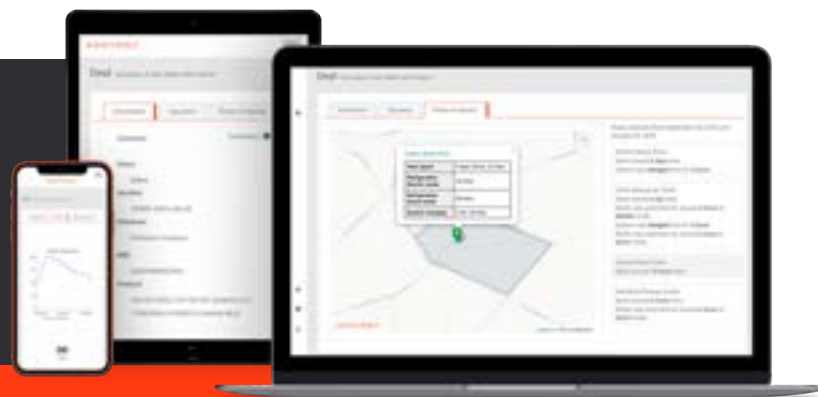
Use Cases

Hydrogen Truck

EUROPE



 **Real-Time Data
Monitoring with
My Addvolt**



ADD **Power Unit**



Purpose

- Emission-Free Delivery at Inner Cities
- Charge Battery on Drawbar from Hydrogen Truck
- Run Reefer Unit on Drawbar with Energy from Truck

Addvolt Solution

Model ADD Power Unit
Power 19 kW

Reefer Unit

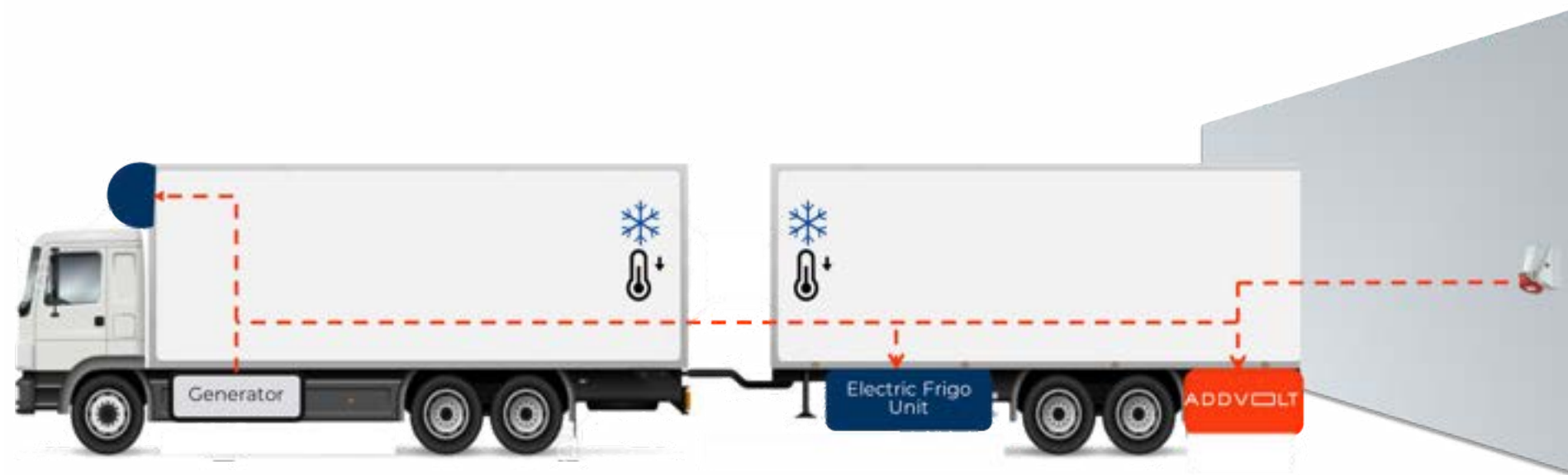
100% Electric
2 evaporators

Results

- Battery Charging from Hydrogen Fuel Cell
- Battery Charging with Reefer Unit Powering
- Independent Electric Cooling at Inner Cities (no need to charge at delivery points)
- No Noise from Reefer Unit during Deliveries

Drawbar / Trailer

EUROPE



Real-Time Data
Monitoring with
My Addvolt



ADDM

Purpose

Parked while Rigid Truck is Delivering Products.
(inner and out of cities parking)

Addvolt Solution

Model ADDM 1919
Power 19 kW
Bat.Cap. 19 kWh

Reefer Unit

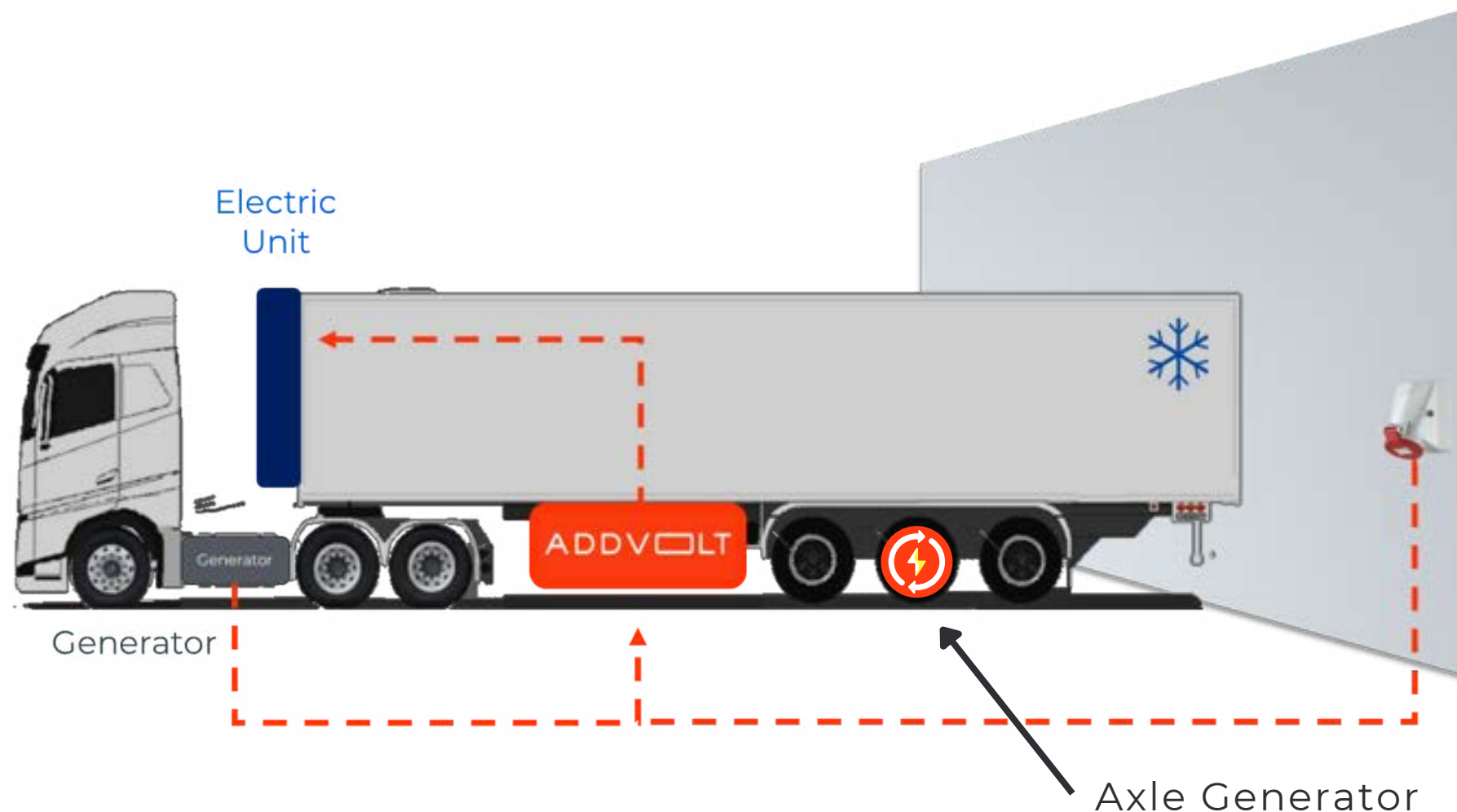
100% Electric
2 Evaporators

Results

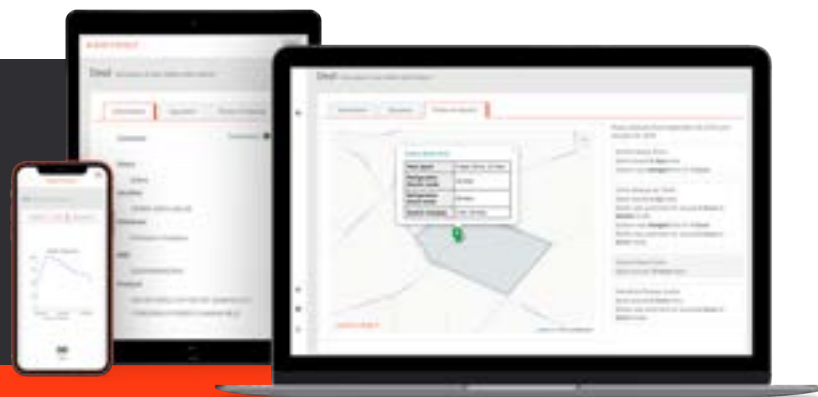
- Diesel Genset Replaced by ADD Powerpack
- ADD Powerpack on Drawbar Recharged by the Truck's Generator
- Battery Charging while Parked in Warehouse

Container Chassis

EUROPE



 Real-Time Data
Monitoring with
My Addvolt



ADDM

Purpose

Keep the Goods at Needed Temperature using Electric Energy from the Battery, instead of using diesel generator.

Addvolt Solution

Model ADDM 1919
Power 19 kW
Bat.Cap. 19.2 kWh

Reefer Unit

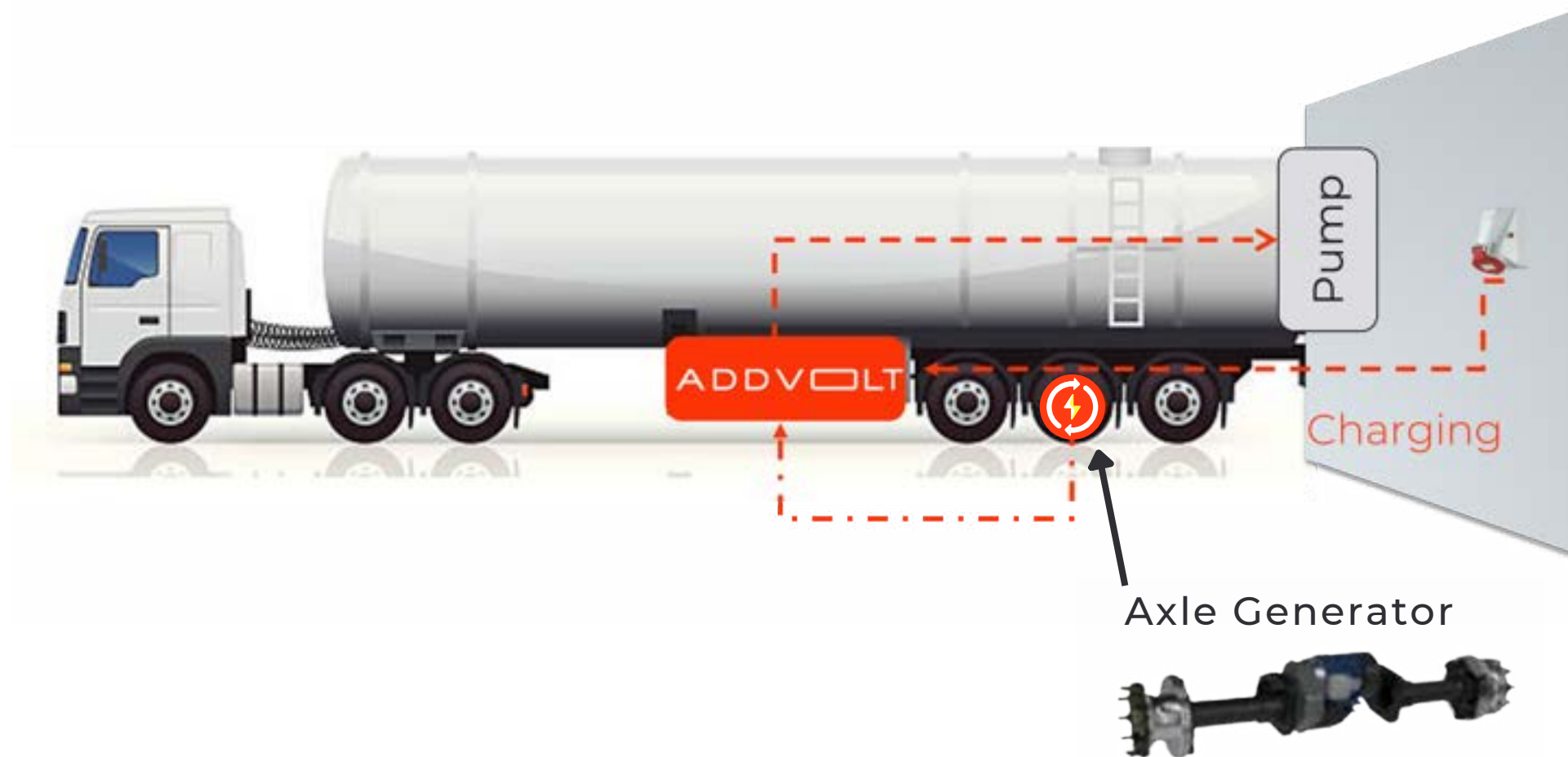
- Standard with electric stand-by motor
- 2 Evaporators

Results

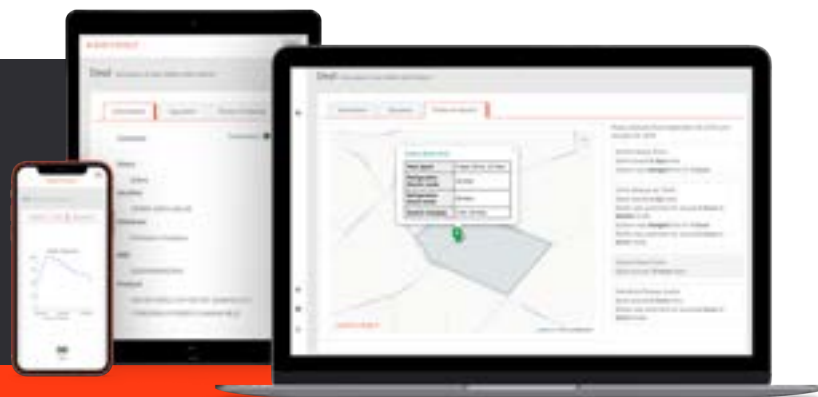
- Achieve the Right Temperature Conditions in the Container using Electric Energy
- Battery on Trailer Recharged by Axle Generator
- Battery Charging while Parked in Warehouse through a 3-Phase Standard Plug

Semi-Trailer

EUROPE



 Real-Time Data
Monitoring with
My Addvolt



ADDM

Purpose

- To Power the Milk Pump with Electric Clean Energy
- Reduce Carbon Emissions and Noise Levels

Addvolt Solution

Model	ADDM 0711
Power	7 kW
Bat.Cap.	11 kWh
Add-On	Axle Generator

Pump

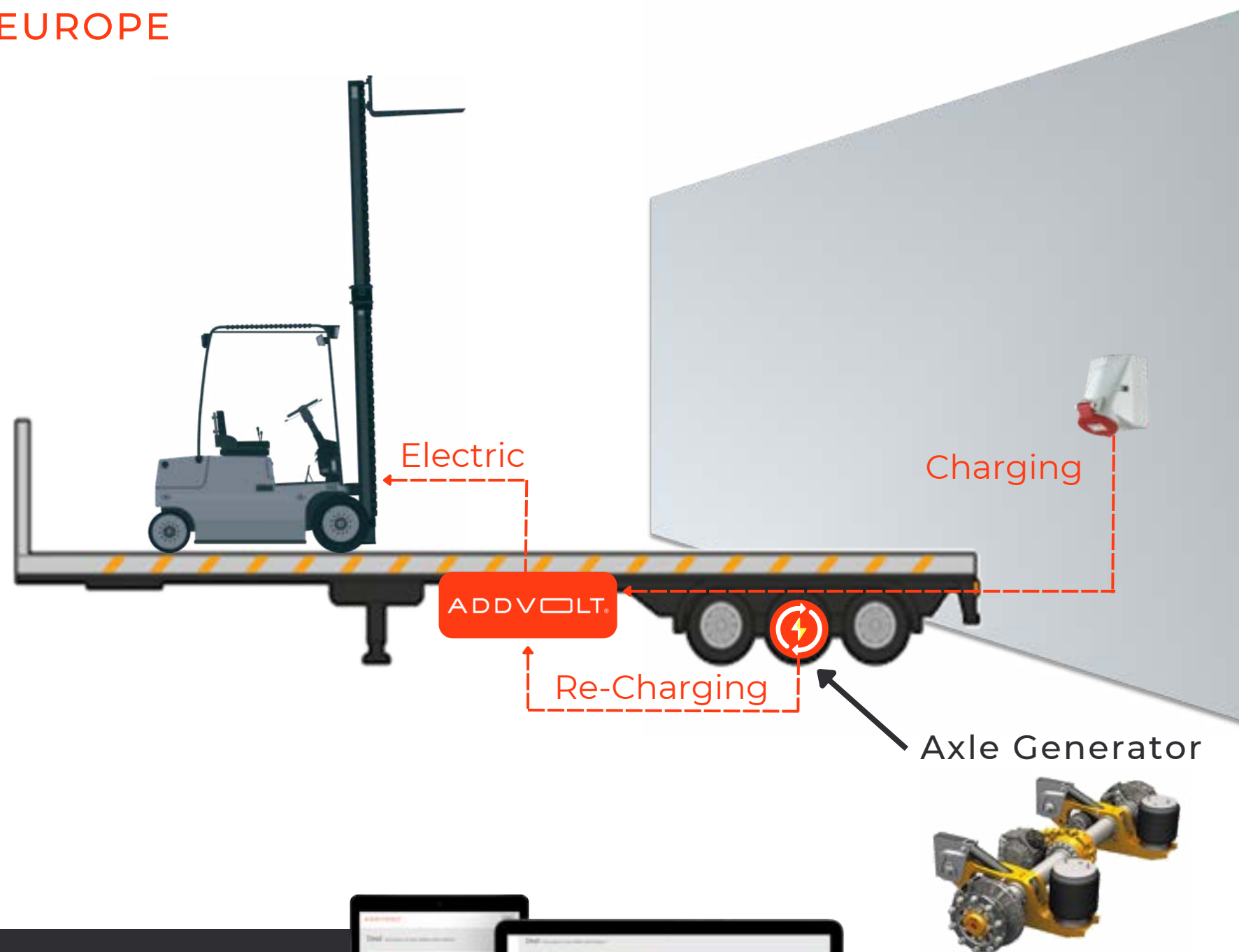
Electric Powered

Results

- No Diesel Generator. Zero-Emissions. Less Noise.
- ADD Powerpack Powers the Milk Pump 100% of the Time
- Battery Recharged by the Axle Generator while the Vehicle is Driving
- Battery Charging while Parked in Warehouse through a 3-Phase Standard Plug

Semi-Trailer

EUROPE



 Real-Time Data
Monitoring with
My Addvolt



ADDM

🎯 Purpose

- Keep Forklift Charged during the Trip
- Get More Autonomy for the Operations

📦 Addvolt Solution

Model	ADDM 0711
Power	7 kW
Bat.Cap.	11 kWh
Add-On	SAF Track-R

Forklift

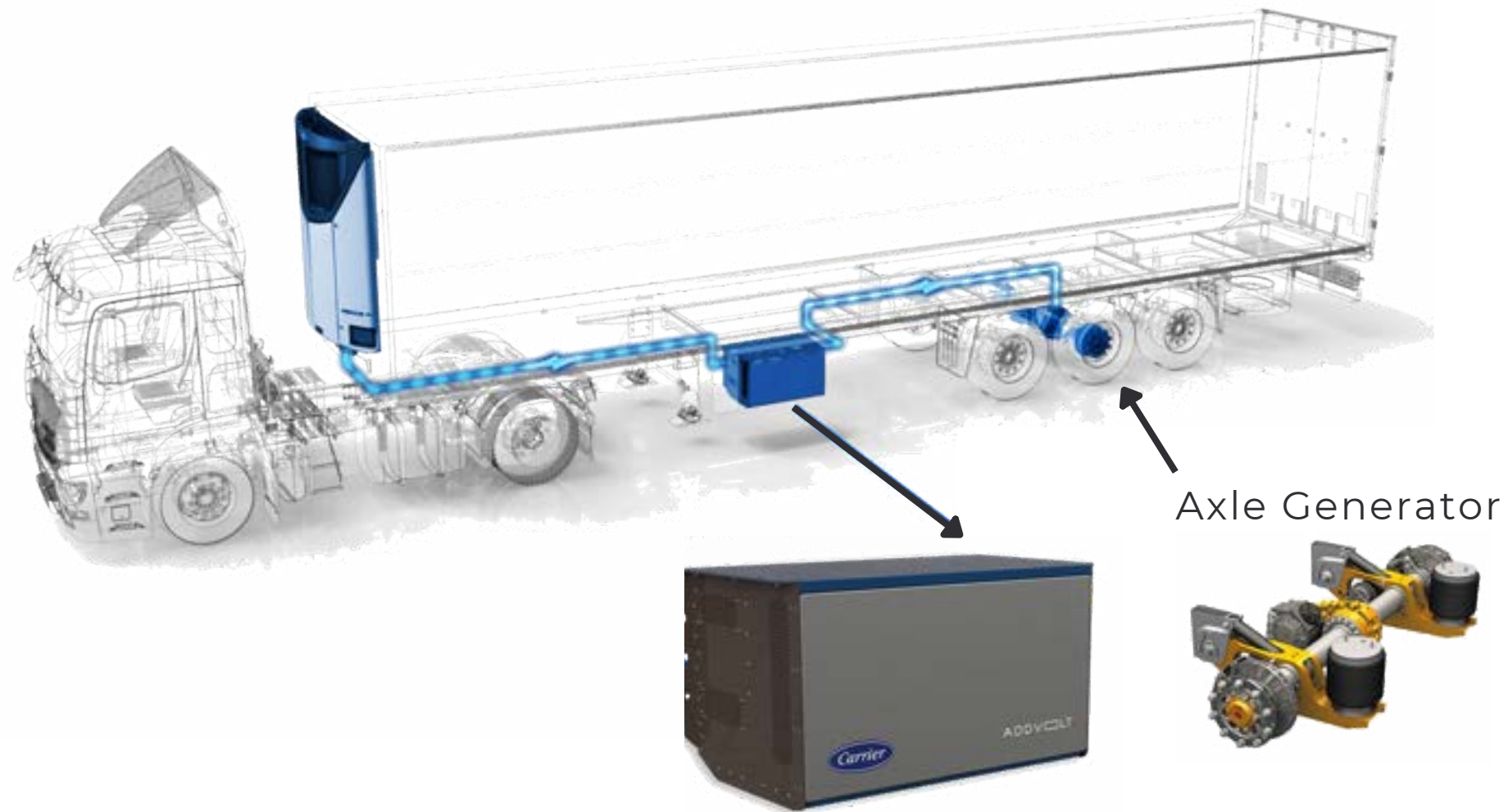
Electric Powered

✅ Results

- No Diesel Generator. Zero-Emissions. Less Noise.
- ADD Powerpack Powers the Forklift 100% of the Time
- V2L (vehicle to load) able to Power External Lightening and Tools
- ADD Powerpack Enables 24h/day Operations

Semi-Trailer

EUROPE, AUSTRALIA



🎯 Purpose

- Running the Cooling Unit in 100% Electric Mode
- Deliveries with Less Noise

🔌 Addvolt Solution

Model	Vector eCool
Power	19 kW
Bat.Cap.	19.2 kWh

❄️ Reefer Unit

100% Electric
2 evaporators

✅ Results

- Battery is Powering the Fridge 100% of the Time
- No Diesel Engine, No Diesel Usage
- Less Noise from Reefer Unit during Deliveries

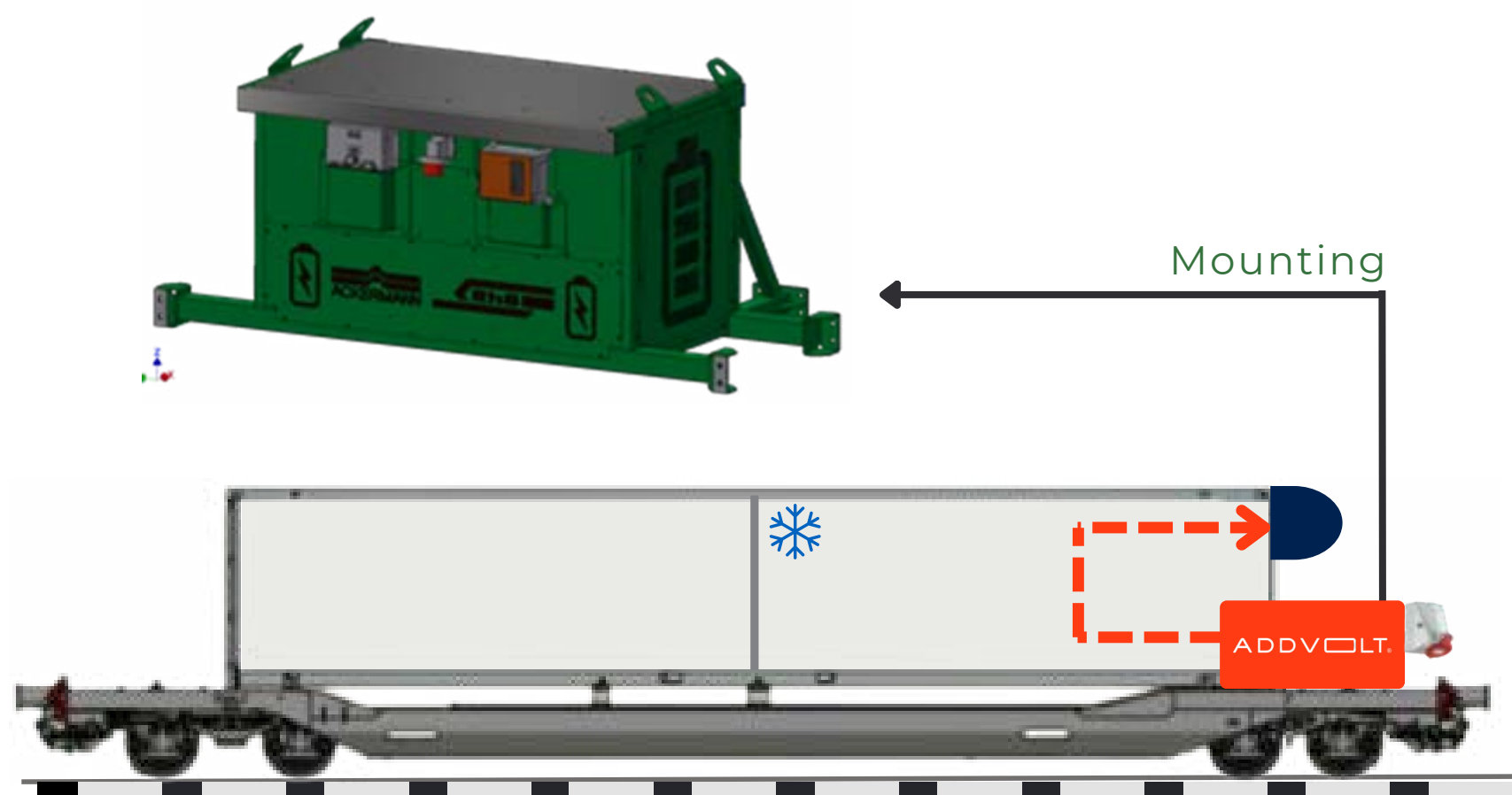
📶 Real-Time Data
Monitoring with
My Addvolt



Use Cases

Addvolt RAIL

SWITZERLAND



 Real-Time Data
Monitoring with
My Addvolt



ADDL

Purpose

Running the Cooling Unit in 100% Electric Mode.

Addvolt Solution

Power 19 kW
Bat.Cap. 35 kWh

Reefer Unit

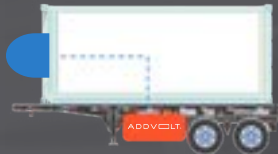
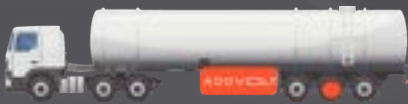
100% Electric

Results

- Multi-position Container Placement
- Diesel Generator Replaced by Addvolt Powerpack

Addvolt Use Cases



Vehicle Type	Purpose	Solution	Environmental Impact per Vehicle
Truck	Replace Diesel		12 Ton CO ₂ /year
Electric & Hybrid Trucks	Extend Truck's Range (incl. Cooling)		6 Ton CO ₂ /year
Drawbar / Trailer	Replace Diesel		10 Ton CO ₂ /year
Semi-Trailer	Replace Diesel		15 Ton CO ₂ /year
Container	Replace Diesel Gensets		15 Ton CO ₂ /year
Tank Trailer	Replace Diesel Gensets		10 Ton CO ₂ /year
Rail	Replace Diesel Gensets		12 Ton CO ₂ /year



Real-Time Data Monitoring

MyAddvolt is a digital platform that enables Real-Time Data Monitoring and Performance Insights of the vehicles. With a user-friendly interface, MyAddvolt allows you to Optimize Energy Consumption, Track Carbon Footprint, and Manage Operational Efficiency. Start today turning your fleet more sustainable and cost-effective.



Thank You!

About Addvolt

Addvolt is leading the World's Transport Electrification with our World's First Plug-in electric system targeted for transportation markets and working closely with our partners and clients on more than 18 markets around 3 continents.

We develop Intelligent, Simple and Non-Invasive technologies in close cooperation with our customers with the aim of reducing the transportation costs of goods by using Electrical and Sustainable Energy.



Building a Smart and Sustainable
Transport Worldwide.

 addvolt.com



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Electrification Partner
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ADDVOLT.®

Clean Energy to Transportation

