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**For Immediate Release**

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## **Carrier Transicold Demonstrates New Vector Concept with Hydrogen Integration for Road Transport Refrigeration at IAA Transportation Show**

**RUEIL-MALMAISON, France, September 20, 2022** — In another demonstration of its commitment to electric and sustainable temperature-controlled transport solutions, [Carrier Transicold](#) unveiled its first trailer concept powered by a dedicated hydrogen fuel cell at IAA Transportation 2022. The fuel cell system was specifically developed to integrate within the chassis of the Vector<sup>®</sup> transport refrigeration unit (TRU). The system delivers zero direct emissions without a reduction in performance or refrigeration capacity. *Carrier Transicold is a part of Carrier Global Corporation (NYSE: CARR), the leading global provider of healthy, safe, sustainable and intelligent building and cold chain solutions.*

Developed in close cooperation with Bosch and PowerCell Sweden AB, the new hydrogen fuel cell technology will be coupled with Carrier Transicold's Vector HE 19 trailer unit. Central to the innovative new system is the integration of the Bosch 48-volt automotive battery, which directly interfaces the fuel cell with the refrigeration unit, removing the need for a standalone engine or a separately mounted buffer battery system.

“Carrier Transicold continues its electrification journey, providing an electric solution in every area of the temperature-controlled transport market, from vans through

to multi-temperature trailers,” said Victor Calvo, Vice President and General Manager, Carrier Transicold. “The new hydrogen-powered Vector concept is a major step forward for the company and we’re delighted to demonstrate the future of transport refrigeration for customers at IAA. We are committed to exploring every avenue to reduce emissions and deliver better sustainability for customers – and hydrogen fuel cell technology is extremely exciting.”

The hydrogen fuel cell technology delivers the same level of autonomy as existing diesel engines used in the standard Vector units. By using a hydrogen fuel cell system, customers can maintain operations with the legacy products, but without any of the associated emissions.

The new fuel cell system is powered by hydrogen tanks coupled with an electric power distribution unit (PDU). The PDU is used to convert the direct current provided by the fuel cell into the alternating current needed to operate the refrigeration unit. The refilling time for the new concept is equivalent to a standard diesel engine and, depending on the tank size, can also achieve a similar autonomy range.

The combination of the Vector’s existing all-electric E-Drive™ technology – a mainstay of the company’s trailer systems since 1999 – and its innovative design removes the need for the mechanical transmissions found in belt-driven truck and trailer refrigeration systems, making it ideally suited to operate on the electric power derived from the hydrogen cell, while delivering increased efficiency and reduced risk of refrigerant leaks.

Launched in 2020, a first demonstrator version was presented in 2021 by Carrier and Bosch with the hydrogen fuel cell system placed in a frame under the trailer chassis.

The advanced version presented at IAA goes one step further and integrates the hydrogen fuel cell within the standard Vector chassis.

The new concept Vector with hydrogen integration signifies another positive step forward for Carrier Transicold as it continues to push towards its [2030 Environmental, Social and Governance goal](#) of helping its customers avoid more than one gigaton of greenhouse gas emissions.

For more information on Carrier Transicold products and services, visit [www.carriertransicold.eu](http://www.carriertransicold.eu). Follow Carrier Transicold on Twitter: [@SmartColdChain](#) or on LinkedIn at [Carrier Transicold Truck Trailer Refrigeration](#).

### **About Carrier Transicold**

Carrier Transicold helps improve transport and shipping of temperature-controlled cargoes with a complete line of equipment and services for refrigerated transport and cold chain visibility. For more than 50 years, Carrier Transicold has been an industry leader, providing customers around the world with advanced, energy-efficient and environmentally sustainable container refrigeration systems and generator sets, direct-drive and diesel truck units and trailer refrigeration systems. Carrier Transicold is a part of Carrier Global Corporation, the leading global provider of healthy, safe, sustainable and intelligent building and cold chain solutions. For more information, visit [www.carriertransicold.eu](http://www.carriertransicold.eu). Follow Carrier on Twitter: [@SmartColdChain](#) and on LinkedIn at [Carrier Transicold Truck Trailer Refrigeration](#).

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