



Trane Technologies

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TRANE
TECHNOLOGIES

Agenda

- Welcome
- Govt. policy (air quality, emissions)
- Lower GWP for Transport Refrigeration
- Diesel free Transport Refrigeration



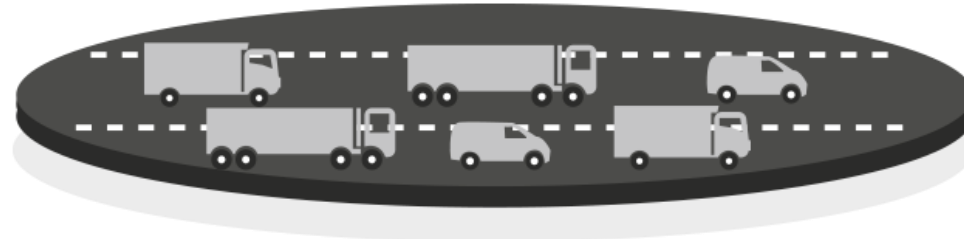
Government Policy

- NRMM
- TRU testing
- Red diesel
- F gas activities



THERMO KING'S COMMITMENT FOR A GREENER WORLD

1.000.000 Refrigerated vehicles on the road worldwide



2013

**Up to
33%
lower
charge**



Thermo King introduces microchannel technology significantly reducing refrigerant charge

2015

**Up to
45%
lower
GWP**



**R-452A
REFRIGERANT**

Thermo King develops R-452A refrigerant, a low GWP solution, soon to become the industry standard

Trane Technologies have launched the **Gigaton Challenge** to reduce 1 gigaton* of carbon emissions from its customers' footprint by 2030

2020

1 Gigaton

2021

Up to 35% lower GWP

Launch of High Efficiency CFF Marine Reefer with R-134a

2022

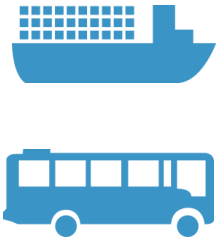
HVAC System with GWP of 1

Launch Bus solution with Natural refrigerant

Low or Ultra Low GWP for all product

Refrigerant Strategy roadmap for all TK EMEA portfolio





Low or Ultra Low GWP

Low GWP refrigerant offering based on application and ambient, Natural and Chemical A2L refrigerant



up to 90% lower GWP

Low GWP refrigerant offering, chemical A2L refrigerant



We take sustainability to our core

1 Gigaton
of CO₂e =

annual emissions of



+



+

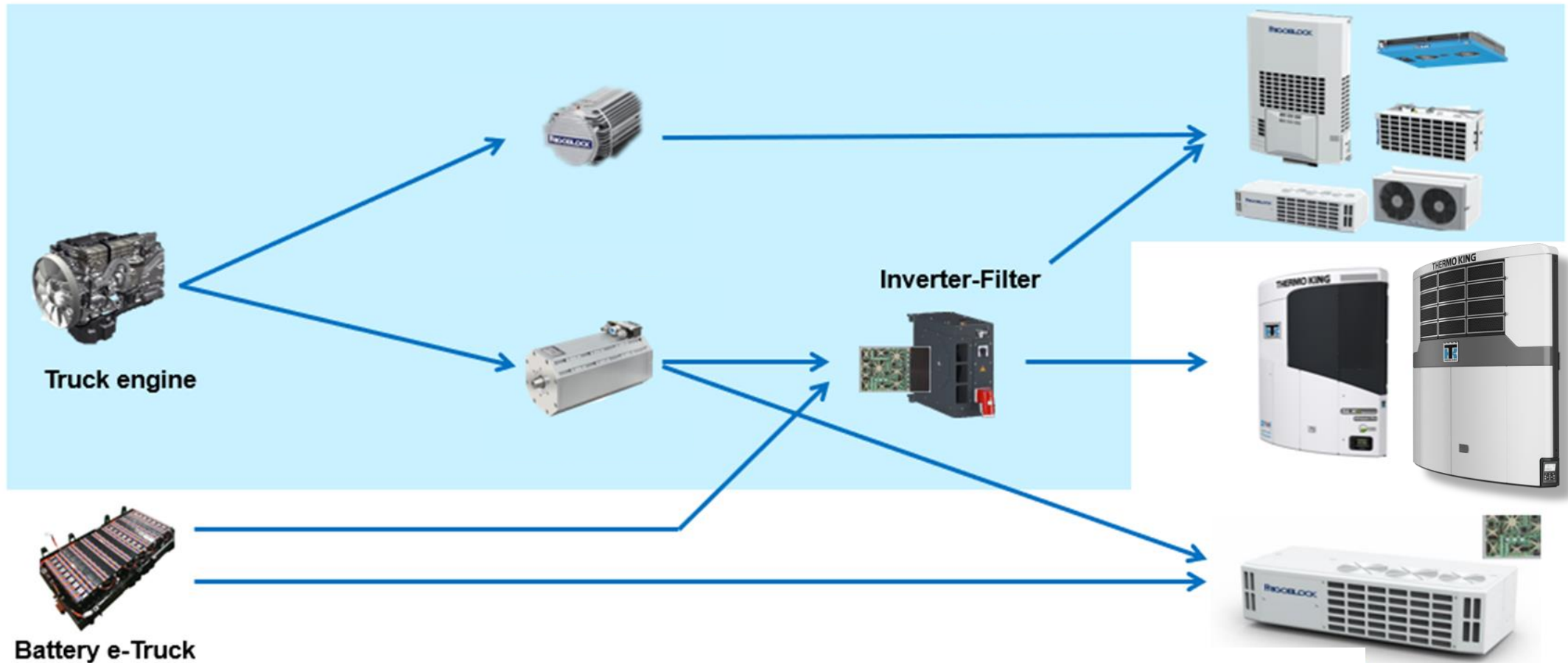
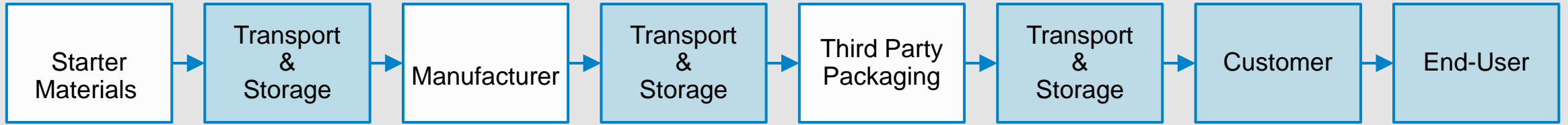


Italy

France

U.K.

Product portfolio across Road, Marine, Rail and Air



Diesel free Transport Refrigeration



Diesel free Transport Refrigeration



Diesel free Transport Refrigeration

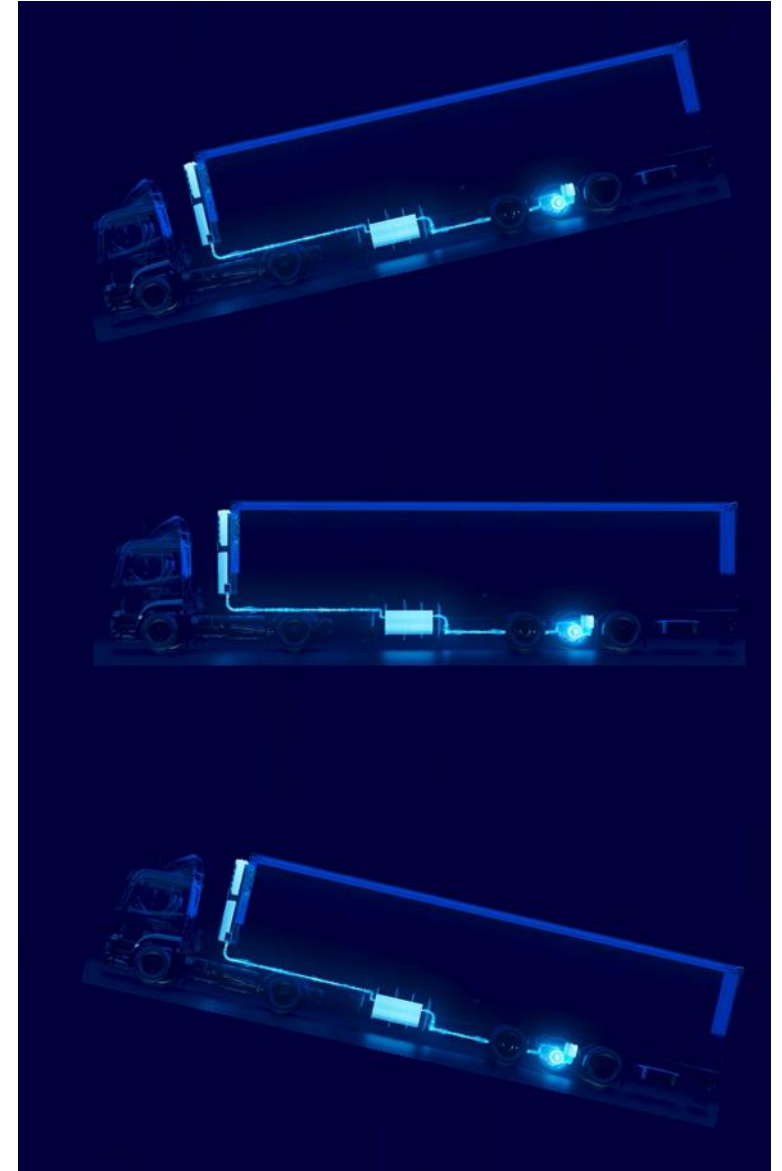
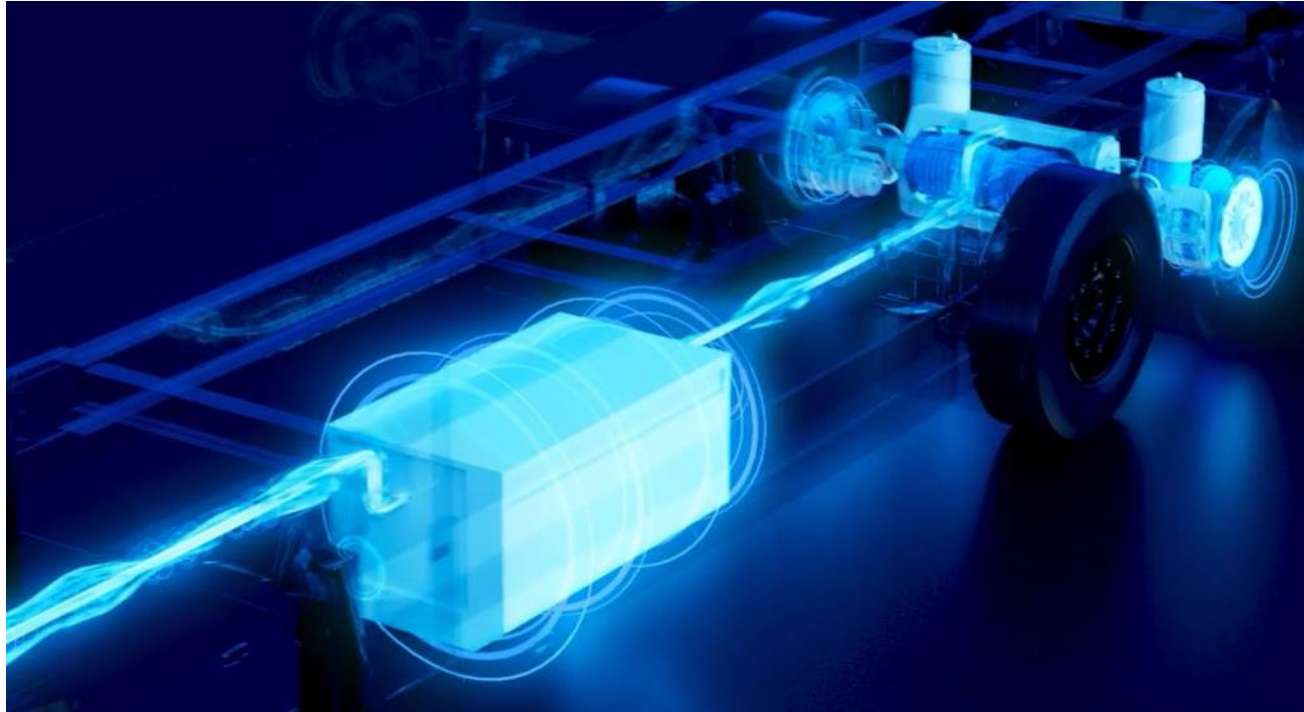


Diesel free Transport Refrigeration



Diesel free Transport Refrigeration

Join us on 14/09.....





— pushing the boundaries of what's
p o s s i b l e

TRANE
TECHNOLOGIES