

CRYOTECH

CLEAN, SUSTAINABLE & COST EFFECTIVE

TEMPERATURE CONTROL

FOR RETAIL & DISTRIBUTION

DISTRIBUTION TRENDS

CONSUMER:

FRESHEST & top quality products

at the **LOWEST** cost

CLOSER to home

Shops **MORE FREQUENTLY**



RETAILERS:

MORE shops **CLOSER** to the consumer

HIGHER logistics complexity

HIGHER Cold chain complexity

HIGHER importance of Cold Chain

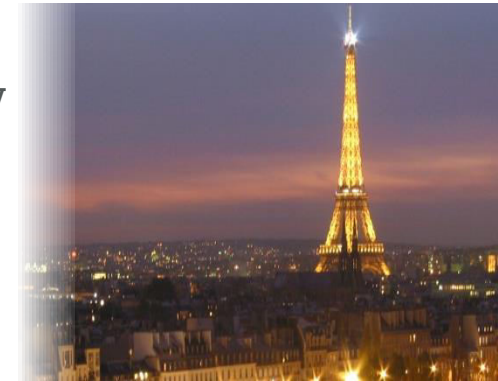


MUNICIPALITIES:

Creating **LOW & ULTRA LOW EMISSION ZONES:**

- Low **NO_x**, **PM EMISSIONS**

- Access **RESTRICTION** to **DIESEL POWERED** vehicles



TRANSPORTERS:

STRONGER transport requirements

Access **RESTRICTION** to inner cities

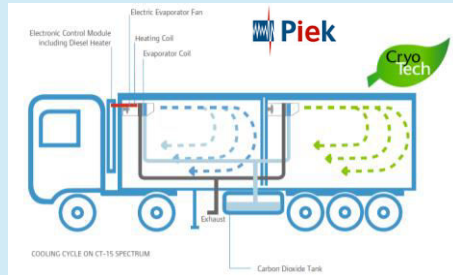
FLEET owners are expected to **RENEW** their fleets



TIME TO CHANGE

CRYOTECH SOLUTION

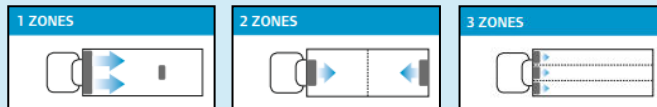
TEMP. CONTROL UNITS



Cryogenic indirect and open loop using R744

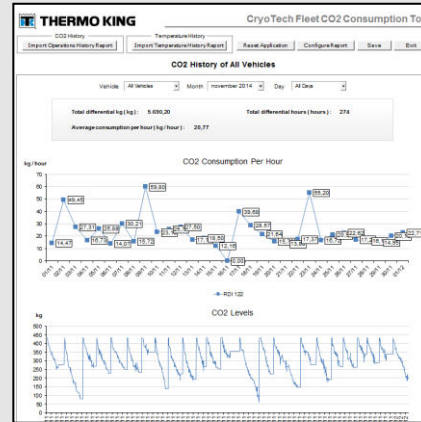


For trucks and trailers



- Multiple applications
- Ambient, fresh and frozen loads
- Up to 3 temperature zones

OPTIMIZATION SERVICES



Unit R744 consumption monitoring and reporting



Unit inspection, optimization and driver training

R744 DISPENSERS

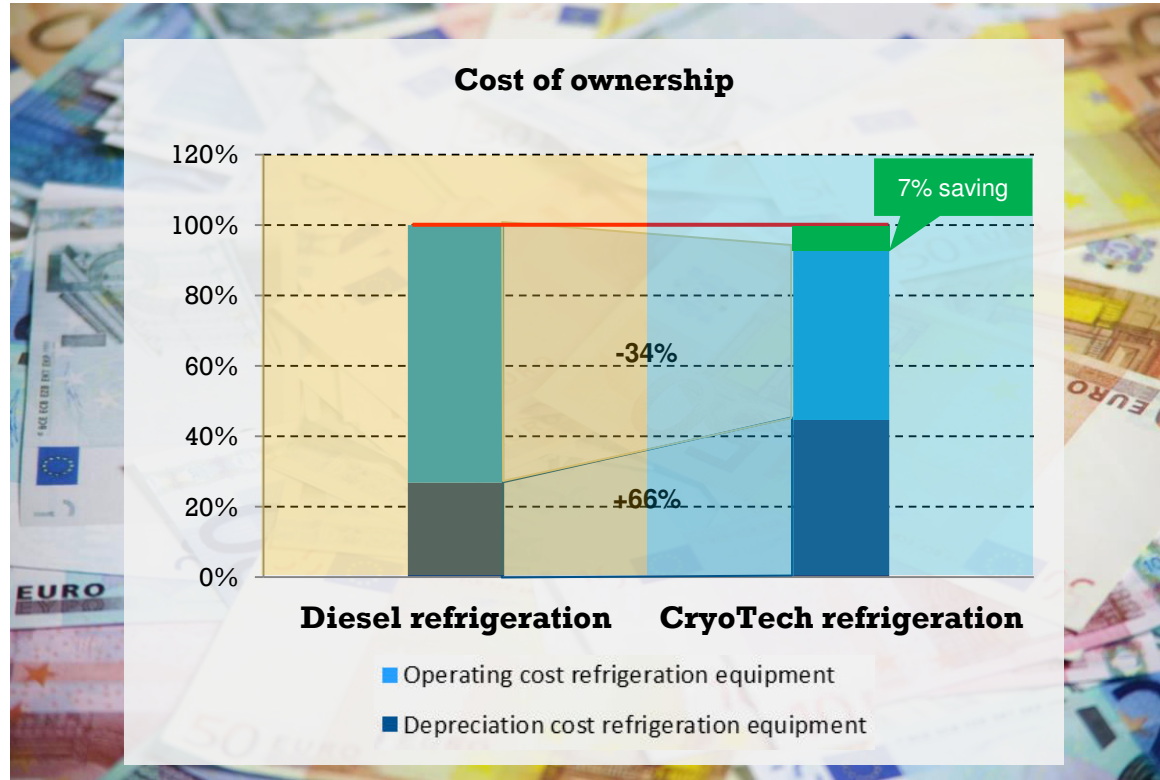


Private locations

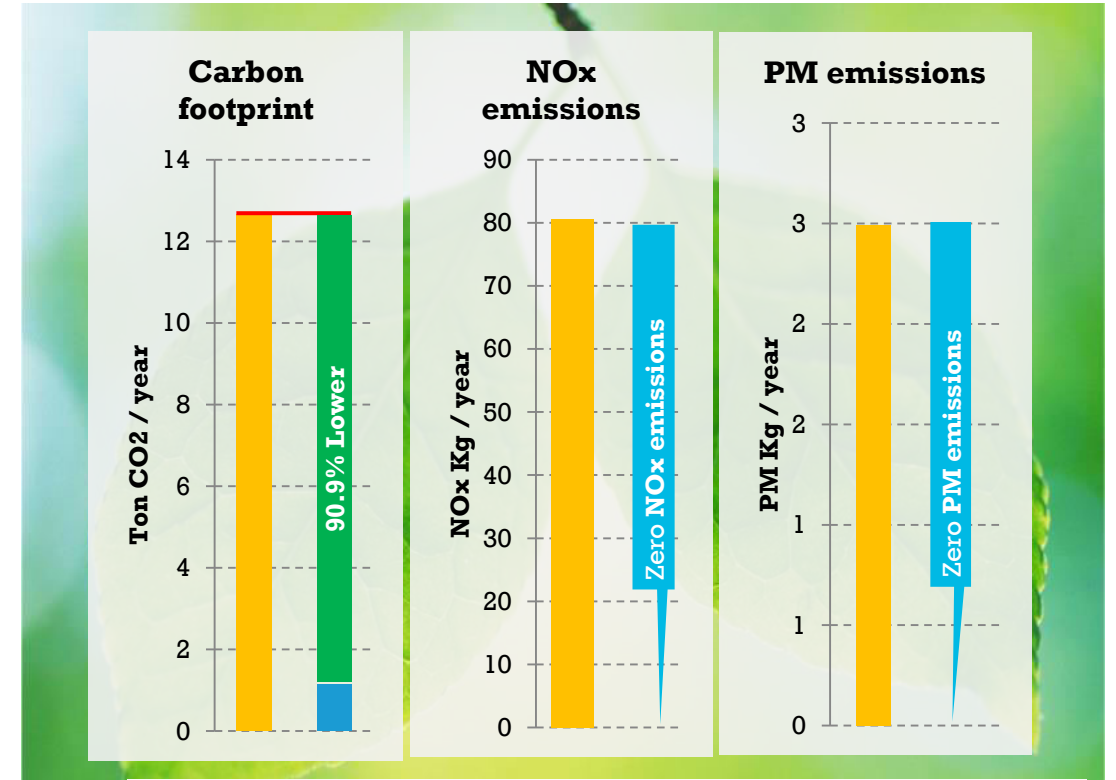


Public locations

UNIT COST & EMISSIONS



■ Diesel refrigeration ■ CryoTech Refrigeration



■ Diesel refrigeration ■ CryoTech Refrigeration

Based on current customers operating optimized fleets in Northern Europe.

LOW EMISSION ZONES

Major EU cities are considering Bans, High tax rates, and/or inner city access restrictions

Paris:

- A fast move towards a better Health:
 - Mid-2015: Ban of Commercial vehicles <2001
 - Mid-2016: Ban of ALL vehicles <2001
 - 2019 = Ban of all vehicles < EURO 5 or 6
 - To be continued...
- Subventions for green vehicles (NG, PEV, ...)
- Low & Ultra Low Emissions Zones (LEZ / ULEZ)

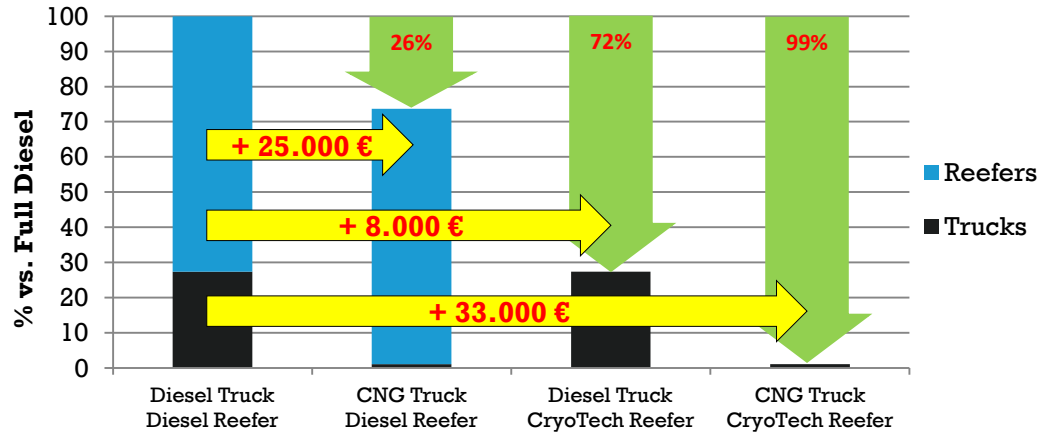


A pollution peak is same as living in a 20m² room with 8 smokers
(source « Le Monde »)

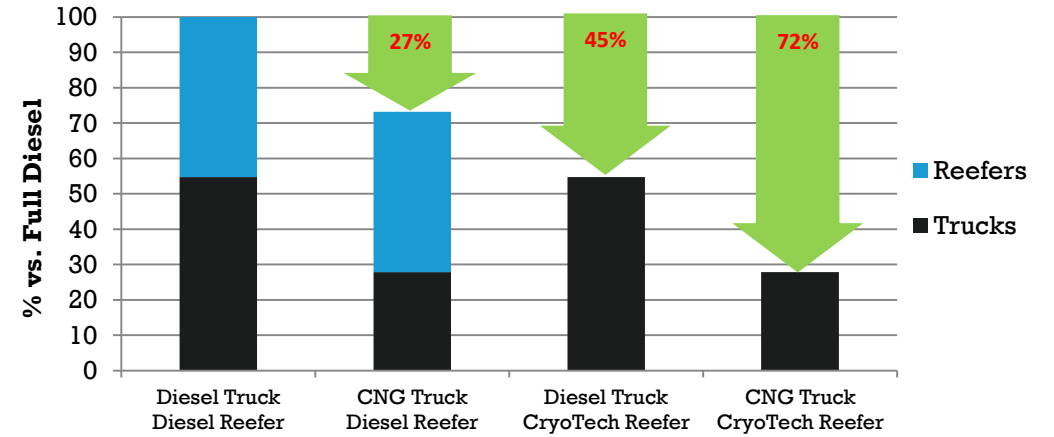
LOW EMISSION ZONES

EMISSIONS OF A COMPLETE REFRIGERATED TRUCK (PARIS FLEET)

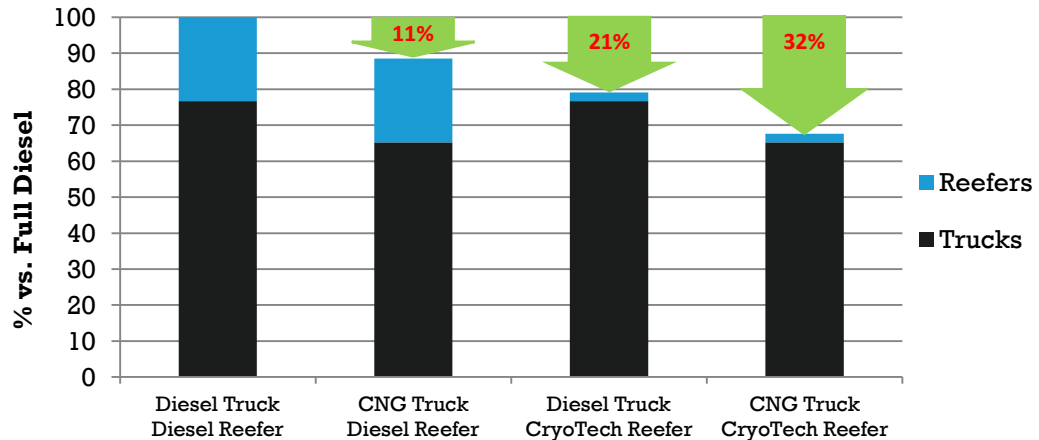
Particulate Matter emissions



NOx emissions



CO2 emissions



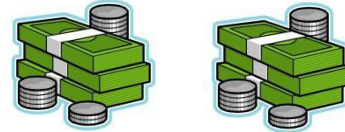
Euro VI: NOx 0,4 g/kWh – PM 0,01 g/kWh
 Tier IIIA: NC+NOx 7,8 g/kWh – PM 0,6 g/kWh
 Natural Gas vs. Euro 6: -15% CO2 / -70% NOx / -96% PM (Source: IVECO)



LOW EMISSION ZONES

CONCLUSION

- **Natural Gas + Diesel reefer**



Environmentally / Economically Non-Sense

- **Euro 6 Diesel + CryoTech**



Cost-Effective Lower Emissions & Lower Noise level for a better place to live

- **Natural Gas + CryoTech**



Accelerating trend to move to the best alternative

And much more.....

CONCLUSION

- Keeps the **integrity of the cold chain in all conditions**
- Allows **night distribution in every corner of the city**
- **Cleanest and most sustainable**
- Meets all future EU and cities increasingly strict **legislative requirements:**
 - Noise
 - HFCs
 - Engine emissions
 - Traffic congestion



MORE INFO...

Watch our Technomercial 17/03 @ 12:30

And

Come and see us at our stand...



THERMO KING

HIGH-TECH. LOW-STRESS.