

CO₂: The Inconvenient Truth

Doubts have recently been raised about the actual 'green' credentials of CO₂ (R-744) due to its inherent lower energy efficiency. There are now better and long-term sustainable technologies for retail refrigeration systems, like the very low GWP Opteon™XL solutions.

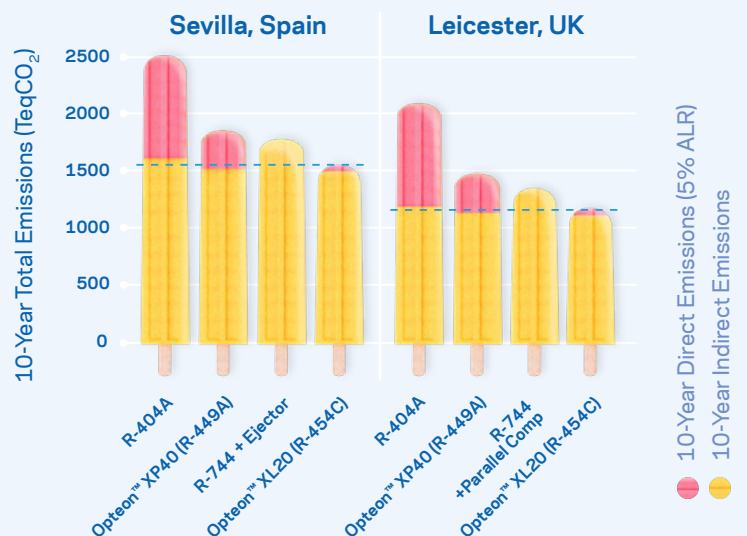


The EU F-Gas regulations primary focus is low GWP not cost, so compared to the high GWP R-404A, CO₂ (R-744) appeared to be a good choice... **But is it really?**

Opteon™XL greatly reduces both direct and indirect emissions.

The low GWP of R-744 has masked its inherent low energy efficiency, even using enhanced system designs such as parallel compression and ejector technology.

Although R-744 achieves the primary objective of lowering the total emissions below R-404A levels, apart from matching cooling performance, R-744 does not really meet retailers' requirements such as **ease of use, energy efficiency and reliability**.



Improvement in 10-year Total Emissions using Opteon™XL refrigerants

From Sevilla to Leicester, Opteon™XL refrigerants consistently show the lowest total emissions for stores with 300m² to 2000m² retail area.

The very low GWP combined with the improved energy efficiency delivered by Opteon™ XL refrigerants result in total emissions 12-13% lower than the optimal R-744 technology.



Whilst delivering the lowest total emissions, Opteon™ XL refrigerants also have 11-13% lower 10-year Life Cycle Cost than the equivalent optimal R-744 technology.

Clearly there is room for improvement over CO₂ technologies, and Opteon™XL provides the solution.



Matches cooling performance



Exceeds energy performance



Improves total cost of ownership



Matches uptime (minimize risk to trade)



Ease of installation and maintenance

Opteon™XL refrigerants, why would you choose anything else?

The information set forth herein is furnished free of charge and based on technical data that Chemours believes to be reliable. Chemours makes no warranties, express or implied, and assumes no liability in connection with any use of this information. Nothing herein is to be taken as a license to operate under or a recommendation to infringe any patents or patent applications. ©2020 The Chemours Company FC, LLC. Opteon™ and any associated logos are trademarks or copyrights of The Chemours Company FC, LLC. Chemours™ and the Chemours Logo are trademarks of The Chemours Company.