

# NEXT Series on CO<sub>2</sub>: Commercial refrigeration done deal in Europe

EUROPE AMERICA BUSINESS & MARKET PRODUCT / TECHNOLOGY COMMERCIAL REFRIGERATION END USER

By Charlotte McLaughlin, Jan 15, 2019, 10:13 GMT+1 • 5 minute reading

The growth of CO<sub>2</sub> transcritical in retail will continue in Europe under the F-Gas Regulation, while the US lags behind.



Photo by Fikri Rasyid on Unsplash.

In this latest of our NEXT Series of articles, CO<sub>2</sub> system manufacturers and component suppliers – along with end users – expressed confidence to this website that CO<sub>2</sub> transcritical would reach new heights in 2019, particularly in commercial refrigeration and particularly in Europe.

"We expect a 50% increase in [our installations of] CO<sub>2</sub> plants," argues Enrico Zambotto, refrigeration director at Arneg, an Italy-headquartered retail solutions provider. He puts this down to the EU F-Gas Regulation, "and its [effect on] increasing [HFC] prices". "Personally I think people are also increasing their sensitivity to the environment."

Italian component manufacturer CAREL has already seen strong growth in CO<sub>2</sub>. In 2018, it tripled the number of its energy-efficient CO<sub>2</sub>-based refrigeration projects with DC inverter technology, the company said in December.

"In 2019 we hope to expand the same focus to other continents," said Diego Malimpena, business unit manager, retail solutions, CAREL. "We expect high demand from the Asian market, which, despite [phasing down HFCs] after Australia, North and South America, may achieve faster results."

Particularly, "China has the greatest potential, following the first CO<sub>2</sub> installations in 2018. In South America, several transcritical CO<sub>2</sub> systems have been installed, including with ejectors, which will lead the way for new projects in 2019," Malimpena argues.

Trascol, an Italian compressor manufacturer, expects increased confidence in the market to help achieve greater sales. "We work every day to provide increasingly innovative solutions. For 2019 we expect to consolidate our CO<sub>2</sub> technologies [and become] a market leader," said Elisa Argenta, the firm's marketing manager.

## Retailers in Europe reach new heights

European retailers are the primary driver for uptake of CO<sub>2</sub> systems, according to Nadine Neuberger, head of marketing at TEKO, a German systems manufacturer. "More European retailers will switch to CO<sub>2</sub>," Neuberger said. "We have [CO<sub>2</sub> transcritical products] for discounters, supermarkets and hypermarkets to target their needs."



More European retailers will switch to CO<sub>2</sub>”  
– Nadine Neuberger, TEKO

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Two leading European retailers, METRO and Migros, concur. "We expect to raise our covering on [natural refrigerants compared] to 2018, especially CO<sub>2</sub>, ammonia and a little more R290," said Andreas Moser, chief refrigeration engineer at Migros' Engineering Solutions, helping Migros to move to "100%" natural refrigerant-based technology.

German multinational cash & carry giant METRO is pursuing a similar plan. "In 2019 we expect to use more NatRefs than FY18, we've increased [our] budget and also the amount of equipment," said Olaf Schulze, director – energy, facility and resource management at METRO AG. "Our most preferred technology/type is [transcritical] CO<sub>2</sub> ejector plants."

"Therefore we've decided now to implement the next stores with ejector technology, e.g. one store in Russe (Bulgaria), one in Częstochowa (Poland), three sites in Russia, two sites in Italy, eight sites in France and one in Belgium," Schulze said.



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"We believe that new equipment can combine energy performance, customer added value, and no (or) low emissions," he added.