

# SPAIN TO SUBSIDISE GREENER COOLING

A new subsidy from the Spanish Environment Ministry – announced at ATMOsphere Ibérica in Madrid – helps to lay the foundation for transitioning to natural refrigerants in the HVAC&R market.

– By Álvaro de Oña & Pilar Aleu



**In** a keynote speech at the inaugural ATMOsphere Ibérica conference, Guillermo Martínez, head of service at the Spanish Office for Climate Change – part of the Ministry of Agriculture and Fisheries, Food and Environment – announced the launch of a new subsidy for sustainable refrigeration.

Martínez told the event – organised by shecco, publisher of *Accelerate*, and held in the Spanish capital on 24 October – that the ministry is introducing a new subsidy programme to help the HVAC&R sector comply with upcoming HFC phase-down deadlines under the EU's F-Gas Regulation. Named 'plan PIMA frío', the total subsidy pot of €1.5 million will help to co-finance new installations of sustainable refrigeration systems.

"We understand that the sector is facing a challenge, and with this new subsidy we would like to provide additional support to facilitate the transition to sustainable refrigeration systems," said Martínez.

The subsidy will provide 15% of the total investment required. To be eligible, systems must use low-GWP refrigerants, have a capacity above 40 kW, and include measures to improve overall efficiency, such as the use of doors for cabinets under 6°C.

The one-day event, with 150 participants from more than 75 organisations, focused on the Spanish and Portuguese markets, as well as Latin America – often the destination of choice for Spanish companies looking for new markets.

## An underdeveloped market

The Spanish market has been slower to adopt natural refrigerants than other European markets.

"Today Spain is perhaps not the easiest market for natural refrigerants, with the market characterised by misunderstandings and a lack of information on both the industry and end-user side alike," said Álvaro de Oña, COO and head of media at shecco, during the event.

"In this context, ATMOsphere Ibérica provided the perfect platform for discussion of natural refrigerants and facilitated exchanges of knowledge and experience between those that are already in the market and 'newbies,'" de Oña said.

Many Spanish supermarkets are only just starting to consider natural refrigerant technologies. Only a few stores in Spain (primarily Carrefour and Consum) are currently using CO<sub>2</sub> transcritical technology.

Yet this is beginning to change as new technologies like ejectors, adiabatic coolers and parallel compression help to bring CO<sub>2</sub> transcritical to warmer climates, according to representatives of manufacturers EXKAL, Tewis, Pecomark, CAREL, Carrier and Frigo-Consulting, who also spoke at ATMO Ibérica.

Julio Corrales of Arneg, whose 20 manufacturing plants around the globe supply technologies to countries with all kinds of climate conditions, argued that, "the use of additional technologies to boost energy savings, such as ejectors, makes CO<sub>2</sub> transcritical a more competitive solution compared to a subcritical installation in warm climates".

Interest in these technologies is becoming more evident, as retailers in Spain like El Corte Inglés, Mercadona, Alcampo, DIA or Carrefour experiment with natural refrigerants.

Pedro Olalla, sales director at Huayi Compressor Barcelona, sees hydrocarbons as another option for the commercial refrigeration industry.

Olalla sees the future of refrigeration as a competition between hydrocarbons, CO<sub>2</sub> and HFOs after 2022. "At Huayi we see hydrocarbons as the refrigerants of the future.



ATMOsphere Ibérica plenary

Hydrocarbons improve efficiency and therefore they boost the overall efficiency of the system as well," he said.

In 2018, the compressor manufacturer expects hydrocarbon compressor sales to increase by 60% compared to the sales volume in 2008.

### Latin America captains NatRef projects

The Ministry of the Environment of Colombia, Estudio Maranca (an Argentinian engineering consultancy) and the United Nations Industrial Development Organization (UNIDO) outlined pilot projects based on natural refrigerants in Latin America during a session dedicated to business opportunities in the region.

Andrés Celave, international projects manager at UNIDO, highlighted the role that his organisation is playing in supporting Latin America's journey towards inclusive and sustainable industrial development.

"We are looking forward to partners bringing efficient and sustainable solutions to Latin America," Celave told the audience.

Argentina has many different climate conditions. "While there is only one CO<sub>2</sub> subcritical installation in the country, at a Walmart Caseros

store, CO<sub>2</sub> transcritical installations are becoming more popular," said Agustín Maranca, director of Estudio Maranca.

"Today there are six transcritical CO<sub>2</sub> systems running and a few more projects in the pipeline, including the first system in a warm climate zone," Maranca added.

Supermarkets working with CO<sub>2</sub> include SAIEP, Walmart and Carrefour. Vital Pilar, a wholesaler, and Alvear Santa Fe Supermarkets are both planning to open CO<sub>2</sub> stores.

Colombia, meanwhile, is experimenting with pilot projects using hydrocarbons for air-conditioning systems.

The Ministry of the Environment in Colombia recently partnered with Thermotar, a local supplier, on a pilot project to manufacture propane-based air-conditioning units.

Under this project, Thermotar is making prototype condensing units, air handling units and rooftop units, all using propane.

Colombia also boasts a CO<sub>2</sub> transcritical system. Colombian grocery chain Éxito fitted its first such system in a new Bogotá

store. The cabinets were provided by EXKAL and featured a rack from Advansor-Hillphoenix.

The new store, which opened on 15 June, is located in the Colombian capital's Multiplaza La Felicidad mall.

Éxito is the main supermarket chain in Colombia, with a total of 266 stores. Looking at highly efficient and environmentally friendly alternatives to traditional refrigerants, EXKAL, based in Navarra, Spain, contributed to the CO<sub>2</sub> transcritical pilot project in the Multiplaza store with a full range of refrigerated cabinets.

"Interest in this technology is growing fast – there are already installations in Argentina, Chile, Brazil and now Colombia," EXKAL CEO Alfonso Antoñanzas told *Accelerate Europe*.

With growing demand in and outside the Spanish market, natural refrigerants look set to take off in the Spanish-speaking world. ■ AdO & PA



ATMOsphere Ibérica took place in Madrid.