

# A natural advance for the US

The newly formed North American Sustainable Refrigeration Council aims to break down the barriers to natural refrigerant selection

Back in September a group of respected environmental leaders in supermarket refrigeration announced that they intend to combine their efforts to overcome the hurdles faced by natural refrigerant technology in North America.

The North American Sustainable Refrigeration Council (NASRC) – the non-profit organisation formed by Whole Foods Market, Hillphoenix, Danfoss, Carter Retail Equipment, True Manufacturing, Bitzer, Parker Hannifin, KW Refrigerant Management Strategy and Source Refrigeration and HVAC – has the lofty goal of tackling the three main issues that prevent the widespread use of naturals: service technician training, codes and standards, and the short-term price premium for these technologies.

The NASRC membership will bring together the full range of food retail refrigeration stakeholders: commercial refrigeration end-users, service contractors, equipment and component manufacturers, and systems engineers and designers.

Keilly Witman of KW Refrigerant Management Strategy, says: “We got tired of talking about what needs to be done to advance natural refrigerant technology in the US and decided to get out there and take action.” Ms Witman used to run the US Environmental Protection Agency’s GreenChill Partnership, so she “knows the powerful environmental change that this industry can accomplish with the right vehicle to channel and motivate its combined efforts”.

Under her tenure at the EPA, more than 8,500 supermarkets managed to reduce their average annual refrigerant emissions by 50 per cent. GreenChill also led the shift in focus in the industry from repairing refrigerant leaks to preventing them with better technology.



“It sounds obvious, but the best way – the quickest way – to eliminate the harm that traditional refrigerants cause to the environment is to stop using them,” adds Liz Whiteley, executive director of the NASRC. “Yet more than 95 per cent of supermarket systems in the US still use ‘super greenhouse gas’ refrigerants, some of which also harm the ozone layer.”

The organisation’s refrigerant end-user members extend beyond traditional supermarkets. Todd Washburn, director of sales and marketing, retail division at True Manufacturing, says: “Convenience stores are also ideal for natural refrigerant technologies and naturals have already made huge inroads in the self-contained sector, mainly standalone refrigerator and freezer cases, beverage vending machines, and reach-in ice cream cabinets.”

“There is no question in my mind that we are all going to wind up using environmentally friendlier natural refrigerants,” says Tristram Coffin, sustainable facilities coordinator at Whole Foods Market and member of the NASRC Board of Directors.

“It’s more a question of whether it’s going to take us five years or 15 years. To move ahead as fast as we’d like, we need a concentrated effort – now – to put the necessary

building blocks in place.”

Bryan Beitler, vice-president and chief engineer at Source Refrigeration and president/CEO of NASRC feels strongly that one of the keys to widespread acceptance of natural refrigerant technology is service technician training.

“There aren’t enough technicians in the US who are trained in the use of ammonia, hydrocarbons, and carbon dioxide in food retail refrigeration. Opportunities to gain hands-on experience are still fairly rare,” says Mr Beitler.

#### Pivotal role

Eduardo Navarro, vice-president and general manager of Hillphoenix’s Systems Division and NASRC board member agrees, adding that systems manufacturers play a pivotal role in service technician training. “It’s imperative that technicians receive comprehensive training, because we recognise that even the most environmentally friendly system


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won’t help the environment if it’s not properly installed and maintained. We work together very closely with technicians and provide intensive training.”

Geoff Amos, head of sales and marketing at Carter Retail Equipment, has experienced from his company’s operations in Europe and Asia that establishing standards and codes for the safe use of naturals in a new market is critical: “I hope the United States can look to international standards to accelerate the rate of adoption of these refrigerants.”

To help with this effort, Danfoss announced the creation of a Codes and Standards Task Force last year. Danfoss’s Peter Dee, NASRC board member, wants to “capitalise on Danfoss’ leadership in this area to help NASRC members speed the implementation of low-GWP refrigerants, including naturals in the US.”

As with many new environmentally friendlier technologies, commercial refrigeration equipment that uses natural refrigerants can be more expensive than traditional equipment. The US finds itself in the typical price/volume Catch-22: end-users are waiting for prices to come down and manufacturers say they can’t bring prices down until they achieve economies of scale.

To counteract the higher costs, NASRC plans to work with utilities and other organisations on incentive programs for end-users that will help level out the price premium. “Overcoming hurdles is a question of the right people, drive, and determination,” says Ms Witman, “and I’ve seldom encountered an organisation with as much of that as NASRC.” 

[www.nasrc.org](http://www.nasrc.org)