



Christopher Kent
U.S. Environmental Protection Agency
Office of Air and Radiation
ENERGY STAR Product Development
Washington, D.C. 20005

Dear Mr. Kent:

Thank you for the opportunity to comment on potential changes to the ENERGY STAR Commercial Refrigerators and Freezers specification (Draft 2 for Version 3). Coca-Cola recognizes and agrees that this specification should be revised so that ENERGY STAR sets differentiation in the marketplace, and more fully aligns with the U.S. Department of Energy test procedures and certification process.

The ENERGY STAR program for commercial refrigeration equipment is important to Coca-Cola. Coca-Cola customers look for the ENERGY STAR label, and specify the placement of ENERGY STAR qualified machines with their contract renewals. To support customer requests for ENERGY STAR machines, Coca-Cola is vigilant at purchasing and placing only ENERGY STAR qualified machines. It is for this reason that we are compelled to **request special/unique consideration and treatment of environmentally beneficial HFC-free commercial refrigerators.**

Background

Coca-Cola is committed to phasing-out the use of harmful potent greenhouse gases in refrigeration. To reduce emissions of HFCs and avert climate change, Coca-Cola has already begun replacing refrigerators that contain environmentally harmful fluorinated gases with refrigerators that use low-GWP natural refrigerants. R744 (CO₂) is our refrigerant of choice due to its GWP of 1, and being non-toxic and non-flammable.

Coca-Cola is not alone. We have partnered with other beverage companies in the Refrigerants Naturally! initiative, with the support of Greenpeace and the United Nations Environment Programme to promote a shift in point-of-sale cooling technologies to environmentally benign refrigerants. And, as a member of the United Nations Consumer Goods Forum, we, along with 400 other businesses have pledged to begin phasing out the use of HFC gases for new purchases of point-of-sale refrigerators and refrigeration installations, and replace them with non-HFC refrigerant alternatives. Coca-Cola is ahead of this transition, in that we are aggressively working to have 100% of our commercial refrigerator purchases as HFC-free by the end of 2015. We want to protect the atmosphere and planet, and recognize that the elimination of HFCs is critical to this end.

There are compelling business reasons for going to non-HFC gases in commercial refrigeration: such as new requirements from customers, the reasoned expressions of NGOs, the EPA GreenChill program, and the EPA industry initiative.

Request

To qualify an R744 commercial refrigerator under Version 3, the unit should meet the requirements of the current Version 2 Table 1 Maximum Daily Energy Consumption, not the Maximum Daily Energy Consumption Requirements of Version 3, Table 1 on page 4. The Version 3 Table 1 requirements should apply to R744 commercial refrigerators two years after the effective date of the specification.

Rationale

R744 is commercially a comparatively new refrigerant and the supply chain is not as broad and robust as that of the incumbent HFC technology. In most cases, manufacturers are designing around a very limited set of components for CO₂ refrigerant – resulting in compromised designs (and slightly less efficiency). This is due to the infancy of the supply chain – and not inherent to the technology. All refrigerant compressors are designed for a specific refrigerant and a specific range of operating conditions. Operation outside the envelope of conditions will result in inefficiencies, poor performance, or the premature failure of the compressor. There are not R744 refrigerant compressors commercially available for optimal performance in all cooling capacity ranges yet. There are also supply chain limitations with R744 refrigerant expansion devices. More time is needed for R744 commercial technology to mature.

By being refrigerant neutral, ENERGY STAR would be showing a refrigerant bias. It would reflect a preference for whatever has commercial dominance here, and penalize low-GWP natural alternatives that have a less developed supply chain. The net effect of this unintended refrigerant bias is shutting-down innovation, disincentivising commercial development, and discouraging phasing-down potent greenhouse gas refrigerants. This would give industry little reason to cooperate with any initiatives to phase-down the use of hydrofluorocarbon gases in refrigerators. A standard that reflects preferential commercial treatment of a specific technology, such as HFCs, prevents the commercial development of other efficient solutions.

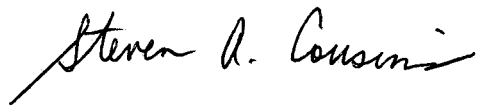
Next Steps

The ENERGY STAR program may want to be “technology neutral” by not referencing refrigerants. But F-gas emissions and energy consumption cannot be treated as completely isolated and separate issues. One is intricately connected to the other.

It is our mutual goal to migrate to long-term environmentally benign and sustainable cooling approaches. Natural refrigerants, such as R744 can be a long-term solution to meet our cooling needs. But this cannot happen if standards are set that impede development and prevent businesses from using R744. Support from rulemakers is needed to enable and accelerate market uptake. Qualifying MDEC levels for R744 should not be lowered in the new version

ENERGY STAR Commercial Refrigerators and Freezers specification, allowing a supply chain to develop.

Coca-Cola requests that the ENERGY STAR program enable commercial innovation that delivers long-term benefit to the atmosphere and planet. To avert climate change, it is necessary to remove harmful HFCs from refrigeration, and not inadvertently foster standards which sustain, or even mandate continued production.



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