

Efficiency Standards for Commercial Refrigerators and Freezers Will Save Money for Businesses, Cut Pollution

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The U.S. Department of Energy (DOE) recently finalized an update to efficiency standards for commercial refrigeration equipment. The standards will reduce a significant energy cost for restaurants, convenience stores, and supermarkets.

Updated efficiency standards announced by DOE in December will ensure new commercial refrigerators and freezers use proven technologies that reduce energy waste. The standards will reduce overall costs for restaurants, convenience stores, and supermarkets that use these products. Savings on electricity bills will far exceed any increase in upfront costs, with a typical payback period of 3.5 years (the average expected product lifetime is about 12–14 years depending on the product type). By using energy more efficiently, equipment meeting the new standards will help reduce growing strain on the electric grid.

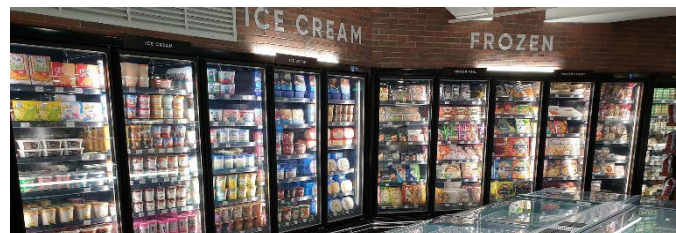
The standards set strengthened efficiency levels for a range of commercial refrigerators and freezers, such as those with transparent doors or without doors (common in grocery stores) and those with solid doors (common in commercial kitchens).

Nearly two-thirds of models on the market today, totaling more than 12,000 unique products, already meet the standards; models that do not will need to be modified to match their higher-performing peers to be sold when the standards take effect in 2029. Depending on the product category, manufacturers can implement a variety of technologies, such as efficient electronically commutated evaporator and condenser fan motors, variable-speed compressors, and better-insulated glass doors, to bring new refrigerators and freezers up to the standards.

In response to manufacturer comments, DOE finalized standards at levels that are less stringent than those it had proposed.

Commercial refrigeration standards were last updated in 2014. DOE was required by law to finalize new standards (if cost-effective) by 2022.

The standards will save businesses \$4.6 billion on utility bills and reduce carbon dioxide emissions by nearly 20 million metric tons over 30 years of sales, DOE estimates.



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