

## High unexploited efficiency potentials for commercial refrigeration appliances

The European Member States are voting on the new Ecodesign and Energy Label regulations for refrigeration appliances with a direct sales function. Studies have already predicted enormous savings up to 19 TWh/yr of electricity by 2030. As a reminder, commercial refrigerators consume significantly more energy than comparable household appliances. On Topten, the top three glass door beverage coolers consume 8 times more energy than the top three household refrigerators of the same size. This difference in energy consumption is not only due to the use of different measurement standards.

To remove the effect of the measurement standard on the declared energy consumption, Topten tested one household refrigerator and two beverage coolers according to both the test standard for household refrigerators and beverage coolers. The results show that when comparing appliances using the same test standard, a beverage cooler with a solid door still consumes 3.5 times more energy than a household refrigerator, while a beverage cooler with glass door still consumes 5 times more energy than an equivalent household refrigerator.

Topten measured the energy of a beverage cooler with a glass door and an equivalent model with a solid door. As expected, the energy consumption of the glass door appliance was higher than the solid door model by 40%.

In 2016, a new test norm for beverage coolers was adopted. Topten tested both beverage coolers according to the old and new norm for beverage coolers to assess the deviation in energy consumption. The results with the old method show a 45% higher energy consumption. This is mainly due to the door opening sequence of this test standard.

Results demonstrate the importance and the urgency to introduce the first regulation on refrigerating appliances with a direct sales function. This would give manufacturers an incentive to implement efficient, non-proprietary technologies and provide buyers a transparent decision-making tool.

## More information:

- Download the detailed test results (also available on Topten.eu)
- Download a PDF of this Focus
- Contact: <u>maike.hepp@topten.ch</u>