

# Restaurants could cut energy use in half, report says

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A new PNNL report found that fast-food eateries could reduce their energy use by more than 50 percent by using energy-efficient appliances and integrated design methods. One of the largest energy consumers in quick-service restaurants is cooking equipment. Here, an Energy Star-qualified fryer is tested at the Food Service Technology Center in San Ramon, Calif. Photo courtesy of Food Service Technology

Coffee shops and fast-food eateries could reduce their energy use more than 50 percent with ultra-efficient appliances, lights and heating, ventilation and air-conditioning systems and other integrated design methods, according to a new report by the Department of Energy's Pacific Northwest National Laboratory.

These measures could save quick-service restaurants between 41 and 52 percent in energy use, depending on the restaurant's location. [Restaurants](#)

in the nation's coldest climate zones, such as those in Duluth, Minn., and Fairbanks, Alaska, stand to save the most energy. And it would take between 1.5 and 3.5 years for restaurant owners to recoup their investment through energy savings, the report states.

To calculate these savings, PNNL researchers modeled a typical 2,500-square-foot quick-service restaurant and then plugged it into an [energy simulation](#) computer program called [EnergyPlus](#).

The information will help develop the next series of *Advanced Energy Design Guides*, which architects, engineers and building designers use to achieve exceptional energy performance in buildings. The report is part of PNNL's ongoing research efforts to help reduce U.S. [energy usage](#), as buildings account for more than 40 percent of the nation's total energy use.

**More information:** For a more information on this research and a link to the full report, go to an Oct. 8 announcement by DOE at [apps1.eere.energy.gov/news/pro...alerts.cfm/pa\\_id=419](https://apps1.eere.energy.gov/news/pro...alerts.cfm/pa_id=419)

Provided by Pacific Northwest National Laboratory

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