# Proposed Ceiling Fan Standards Would Cut Utility Bills for Households and Businesses

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*The U.S. Department of Energy (DOE) recently proposed a modest update to efficiency standards for ceiling fans. The proposal should be strengthened to cut household costs and greenhouse gas emissions significantly more.*

Many ceiling fans sold today use inefficient motors, resulting in higher utility bills for households and businesses, along with needless climate pollution from power plants. Standards proposed in June by DOE would ensure more products take advantage of efficient technology already used in many models. The proposal includes separate minimum efficiency levels for different types of fans used in homes and businesses.

**The proposed standards would save U.S. households and businesses up to $5 billion and avert 18 million metric tons of carbon dioxide emissions over 30 years of sales. But stronger standards would deliver far larger benefits.**

However, for residential ceiling fans, which include standard and hugger fans, only the largest models would see big efficiency gains from use of more-efficient DC motors. These larger fans make up only about 11% of the residential fan market and are typically high-end products. Efficiency and consumer advocates, including ASAP, the American Council for an Energy-Efficient Economy, Consumer Federation of America, and the National Consumer Law Center, are calling for DOE to strengthen the proposed standards for residential models so that all households that use ceiling fans benefit from efficient motor technology.

## PROPOSED EFFICIENCY LEVELS FOR HOME MODELS SHOULD BE BOOSTED

Under DOE's proposal, purchasers of new residential standard and hugger fans with diameters of 53 inches or less are expected to see annual energy savings of only about 8% and 4%, respectively. Much of the efficiency gains are likely to be met by increasing ceiling fan airflow. In contrast, a standard level consistent with what DOE proposed for larger residential fans (i.e., effectively requiring DC motors) would result in energy savings of nearly 50% for smaller residential fans.

Fortunately, DOE could still set stronger final standards for these smaller residential ceiling products that would deliver benefits for consumers more than four times greater than the proposed standards, with consumer net savings of nearly $21 billion.

Common home fans sold in the United States are nearly all manufactured in Asia, so changes to the standards for these models would have little impact on domestic manufacturers.

## STANDARDS FOR LARGE-DIAMETER AND HIGH-SPEED BELT-DRIVEN FANS WOULD REDUCE COSTS FOR BUSINESSES

DOE's proposed standards for large-diameter fans (LDCF) and high-speed belt-driven fans (HSBD) would reduce costs for the restaurants, warehouses, and other commercial and industrial facilities that use them. For example, DOE estimates that the average life-cycle cost savings for purchasers of HSBDs are almost $700, approximately equal to the initial purchase price of the fan.

According to DOE, at least three-quarters of today's LDCF models and more than half of HSBD models already meet the proposed standards. For HSBD fans, manufacturers of products that do not yet meet the new standards could use more-efficient motors with existing fan designs. For LDCFs, DOE expects that manufacturers would optimize motor-transmission assemblies for different blade spans across product lines.

DOE's analysis found that the proposed standards would not cause any change to employment in domestic manufacturing. Manufacturers would have until 2027 to bring their products into compliance.

DOE last updated efficiency standards for ceiling fans in 2017.