

BACK TO BASICS -- Beat global warming with an old-fashioned ceiling fan

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For millions of people living near the equator, relief from the heat comes from simple wooden blades rotating lazily overhead. Ceiling fans were once the air conditioners of choice in the United States as well. In 1960, only 15 percent of U.S. homes were air-conditioned, and up to the mid-1970s, most Americans still relied on fans, open windows, and screen doors to beat the heat. But today nearly every new home in the nation is outfitted with forced-air climate control. Thanks to low energy prices, three-quarters of households chill their air, making this the coldest nation in the world—indoors.

Air conditioners account for one-sixth of the nation's electricity consumption each year. On a typical hot summer afternoon, they gobble up 40 percent of the power during peak periods. And if the trend in record-breaking heat waves and rising global temperatures continues, future consumption will only increase.

Producing enough electricity to meet U.S. demand is already creating enormous environmental pressures. Electricity generation from fossil fuels is responsible for 29 percent of the nation's greenhouse gasses and 70 percent of its acid rain. More than half of its electricity comes from burning coal, the dirtiest fossil fuel, responsible for many of the country's worst pollution problems. Each year coal-fired power plants generate a third of nitrogen oxide emissions, a major component of smog and acid rain; two-thirds of sulfur dioxide emissions, also a key ingredient in acid rain; a third of the country's mercury emissions, which settle in waterways and contaminate the food chain; and over a third of carbon dioxide emissions, the primary global warming gas.

In contrast, the ceiling fan is a sustainable wonder. It is not only elegant, quiet, and inexpensive, but also the epitome of energy efficiency. Even at maximum speed, a ceiling fan uses 50 to 75 watts (as much as one incandescent lightbulb), less than one-tenth as much as a medium-size air conditioner. Running a fan 12 hours a day cost about \$1.50 a month, compared to \$25 for an air conditioner.

Fans cool by creating light breezes that evaporate moisture from the skin. Noncirculating air feels up to 9 degrees warmer than the gentle air circulation from a ceiling fan. So on particularly hot days, you can set an air conditioner's thermostat up to 9 degrees higher with a fan operating and cut energy use by about a third. (Each degree you turn up the thermostat saves roughly 3 to 5 percent in air-conditioning costs.)

Ceiling fans yield even greater savings when combined with other energy-efficient measures, such as well positioned windows and a light colored roof. The beauty of a ceiling fan is that consumers can do their bit for the environment without sacrificing comfort, while saving money to boot.

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