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Get Clean Electricity with Simple Flip of Switch

A smart thermostat selects green energy sources when you crank up your heat or AC.
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Good news on Earth Day for anyone who'd rather buy their electricity from a wind farm than a coal plant.

Nonprofit energy technology company [WattTime](#) has announced a beta program in Chicago that would give individual homeowners at least some control over the kind of electricity they purchase through utility companies.

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Well, kind of — it works like this: For most of us, when we flip a switch in our home, electricity is drawn from the local power grid. But what a lot of people don't know is that the ultimate source of that power changes every five minutes or so. You might be getting power from a coal plant or a wind farm, depending on the time of day.

While you might prefer to get your electricity from a clean energy source, you have no power (heh) over the situation.

But all that may be changing soon. The WattTime system uses cloud-based analytics to monitor the local power grid in real time and identify the “marginal” power plant that's providing electricity in a given area. The system also evaluates the environmental impact of the power plant.

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When relatively clean power sources — wind or solar — have surplus energy to sell, the WattTime system alerts connected power-consuming devices like electric furnaces or air conditioners. By shifting the precise moment when power is drawn from the grid, the WattTime system invisibly selects for cleaner power sources, promoting renewable energy.

This is called Environmental Demand Response (EDR), and while the technology itself isn't new, it's been largely aimed at big energy consumers — office buildings or college campuses, say.

But thanks to the increasing popularity of smart thermostat systems, the technology could quickly move into individual homes. WattTime's pilot program in Chicago will integrate EDR technology into home thermostats throughout the city and surrounding areas.

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Homeowners using the system can simply switch their thermostats to "Clean Power Mode" and the WattTime system kicks into gear.

WattTime has partnered with energy management company [Energate](#) to get the thermostat systems into homes, via HVAC technicians and local hardware retailers. If the pilot program is a success, the technology could be incorporated into more than 3 million U.S. homes within a year, the company says.

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