

Power Players

Today's energy meters suck, says Bruce Sterling. So he started an international race to design tomorrow's lean, green machine. And the winner is ...

One of the most offensive artifacts of the 20th century is the standard household energy meter. This ugly gizmo clings like a barnacle to the outside of your home, readable only by functionaries. Clumsily painted in battleship gray, this network spy device features creepy, illegible little clock dials under an ungainly glass dome. This crass device is designed to leave you in stellar ignorance of your own energy usage. But today, thanks to the Viridian Electricity Meter, the tables are turned."

This ad was written by Bruce Sterling, the science fiction author and founder of the year-old Viridian Movement (www.viridiandesign.org), a group made up of some 1,300 internet activists committed to fighting the greenhouse effect. Based on the belief that society is shaped by the tools it uses, their cybergreen strategy involves reinventing everyday items and dreaming up products that don't exist but ought to – like the Viridian Electricity Meter. Conceived by Sterling and Viridian stalwart Stefan Jones, the device measures household electrical usage and continuously reacts with beeps, chirps, and flashing lights.

The Sustainability Institute, a "think-do tank" based in Portland Four Corners, Vermont, decided the meter was more than an ecofuturist's fantasy and sponsored an international design competition (www.sustainer.org / *Viridian*) to take the idea to the next level. These witty, functional reinventions of the standard meter are a few of the notable entries. Some are designed to stand on the coffee table; others hang on the wall. All are fashioned to bring energy awareness into the living room.

For the moment, these are still imaginary appliances. But the ecomanufacturer Real Goods, based in Santa Rosa, California, is interested in developing the prize-winning Wattbug (opposite) into a real product. As Sterling says, "The concept breathes, and it may yet live!"

Jessie Scanlon

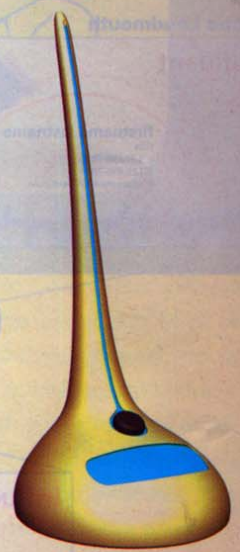


Reaction Power Monitoring System ↑
Christian R. Trifilio
Runner-Up

Trifilio's concept is a fully networked system. The luminescent, gel-filled touchpad switchplate includes a motion detector that turns off lights when the room is empty. The outlet plate displays power usage (in dollars or kilowatt-hours). Both units transmit data to the display hub, a wireless, rechargeable database of energy use.

Sprout ↓
Ceci Thompson
Runner-Up

A strip of low-energy LEDs lining the stalk of this energy meter indicates the level of power usage: At zero consumption, the entire sprout glows. The display, navigated by a single scroll button, shows total energy use for a day, month, or year; periodic comparisons; and dollar amounts.



V-ter ←
Christopher Schmidt
Runner-Up

The creaturelike V-ter climbs the wall-mounted track at a rate of 1 centimeter per kilowatt-hour. The LCD reports relevant power stats, and the red LED on the track lights up when the meter reaches a preset daily consumption limit.



Viridian Electric Meter ↓
Dane Barlow and Eric Ferree
Honorable Mention

A rheoscopic fluid (light-reflecting microscopic particles suspended in water) fills the glass ball and swirls faster when more energy is used. A running graph and other indicators of energy use appear on the base's LCD.

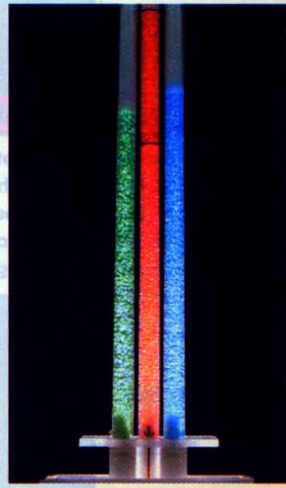


Viridian Electric Meter ↑
Ben Prescott
Honorable Mention

Powered by six photovoltaic panels (the triangular "petals"), this meter blooms to reveal a digital interface, which tallies power use and billing information. The less energy used the previous day, the more fully the meter blooms.

SenseDat Meter ←
Kevin Little
Honorable Mention

Built with off-the-shelf components by a team from Informing Ecological Design, this analog meter uses colored water and air flow (i.e., bubbles) to show relative energy use. Green represents short-term usage, blue the 24-hour average, and red a benchmark level. Less energy equals more bubbles.



Wattbug

Inci Mutlu,
Safak Emrence, and
Suleyman Erdogan
First Place

The Wattbug team - a designer, an architect, and an electrical engineer - created the Tamagotchi of electricity meters. The bug communicates wirelessly with the standard fuse box. The LED on its tail flashes green when power use dips below 4 amperes, yellow for 4 to 12 amperes, and red for the high-use zone above 12. As consumption increases, the bug's expression changes from a smile to a frown, and it replaces its happy purr with a sad grumble.

