

WHAT IS VAMPIRE POWER?

According to the National Renewable Energy Laboratory (NREL), the combined vampire load costs the average household about \$200 each year.

However, others not so much, does your phone charger need to be powered when it's not charging? How about your coffeemaker? Does the coffeemaker really need to be tracking time with the digital clock, when you use it the same time everyday?

The US EPA calculated that 10% of your electric bill is from vampire power. For a device using 80-90 kilowatts (ie. your modem) that's about \$7.50/month or \$90/yr.

Vampire power is the energy used by appliances and electronics when they are turned off or shut down, but still plugged in to a power outlet. It could be a clock running in the back ground, a standard light, or the option for instant wake when the device is picked up. To make our lives more convenient, all take vampire power.

According to the Lawrence Berkeley National Laboratory (LBL), the average home contains about 40 products constantly drawing power, and half that amount in your office.

Generally speaking, the biggest vampire power consumers include any device with a remote control (such as a TV, DVD player or garage door opener), an external power supply (that clunky black box known as a "wall wart" on the plug for your router, printer or cable modem), a charger (for a mobile phone, tablet PC, laptop, GPS or handheld gaming device), or a continuous display (an alarm clock, oven, microwave, VCR or coffeemaker with a digital clock). Laptop computers and cable boxes (particularly cable boxes with integrated DVRs) are among the worst vampire power offenders, drawing an average of 9 watts and 44 watts in "off" mode, respectively. [Source: Lawrence Berkeley National Laboratory].

FOR EXAMPLE: If you leave a heated towel rack plugged in all the time, it uses around 140 watts of power, 24/7, which means an average of around 1,226 kWh of electricity each year.

At \$.12 per kWh, that excessive energy usage means you could be spending an extra \$147 each year on your utility bill just to have warm towels when you get out of the shower!

How do we minimize Vampire Power?

Try plugging into a power strip. Using a power strip eliminates the need to repeatedly unplug appliances from the wall, reducing the danger of frayed cords and wires.

Game Console: 233.9

Cable Box: 140.2

Television: 113.9

Modem: 96.4

Laptop: 62.12

Printer: 55.2

Alarm Clock: 25.4

Smart Bulb: 13.1

Rechargeable Toothbrush: 12.3

<https://palmetto.com/learning-center/blog/vampire-energy-guide>

Most power strips use no electricity at all when they are switched off, cutting vampire power consumption to zero for any appliances/devices plugged into them. If you're worried about cutting power to your computer and other electronics, you needn't be; just be sure to follow the recommended shutdown process when you turn them off, then enjoy the energy savings when you turn off that power strip.

[Source: U.S. Department of Energy].



Five ways to defeat Vampire Power?

1. Be in the know: consider which devices are drawing vampire power and which ones can be turned off.
2. Audit unnecessary devices. Offices will have many devices they don't need. Audit to see how often you use the device and see if you can function without it.
3. Unplug the unused. If the lamp in the corner is for looks more than light, unplug it and save the vampire power.
4. Use the switch on the power strip. Many computers have peripherals that can turn on together. Plug these all into one strip and use the switch to power off and on. This will minimize the energy flow while they are not in use.

5. Use "Power-off" or "Sleep Mode" instead of a screen saver. In the past a screen saver was used to allow you to pick up where you left off, however, when stepping away from your computer, use the Sleep Mode or Power-off option. Today's computer screens are capable to handle the sleep mode and power down options and will save you money.

RECAP:
A. UNPLUG
**B. SHUT DOWN/
PUT IN SLEEP MODE**
C. USE A POWER STRIP

REFERENCE: Lawrence Berkeley National Laboratory

Most of us think about an 'off' device as being completely devoid of power but this simply isn't the case. By making clever use of power strips, smart outlets, and timing, you can significantly reduce your annual power usage.

QUESTIONS OR CONCERNS
RECYCLING SERVICES
fpm@iastate.edu/recycling

For more information:
<https://www.livegreen.iastate.edu/resources/tips/electronics-other-plug-ins>

This brochure references three web-sites:
<https://www.linkedin.com/pulse/eight-ways-reduce-phantom-load-costs-joe-liu/>
<https://electronics.howstuffworks.com/everyday-tech/vampire-power.htm>
<https://www.saveonenergy.com/resources/mapping-vampire-energy/>

THE BIG PICTURE:

What if we looked at what a U.S. household/unit produces in vampire energy...

Total Annual Cost/household unit
\$197.49

Average Number of U.S. Units:
131,715,330.25

Total Annual Vampire Power cost:
\$26,012,052,335.87

WHAT COULD BE SUPPORTED WITH \$26 BILLION:

- 50,000 teachers for 10 Years.
- 50,000 miles of road repair.
- 3 meals/day for 3.4 Million people for a year.
- Solar energy panels for more than 700,000 homes.
- 294,000 homes for homeless Americans.

<https://www.saveonenergy.com/resources/mapping-vampire-energy/>

Vampire Power the secret thief robbing YOUR Energy

Just like stress in your daily life, vampire power steals energy without you knowing it.

Tips to cut vampire power and save money on your next energy bill.

