REDUCE YOUR COMPUTER’S ENERGY USAGE

SUSTAINABILITY OPPORTUNITY

Stanford is home to approximately 40,000 computers, which use 15% of campus electricity. Computers and computing equipment consume electricity directly, and also indirectly by increasing the need for building cooling. By taking simple steps to reduce the energy computers and IT infrastructure require, Stanford’s electricity use can be reduced by 2 million kWh/year — that’s enough to electrify over 200 homes every year. Every member of the Stanford community can reduce the energy needs of his or her computing equipment by implementing the following steps.

Sleep Settings to Maximize Energy Efficiency

- Turn off monitor after 15 minutes of inactivity
- Enable sleep mode after 30 minutes of inactivity
- In desktops, stop hard disks after 5 minutes of inactivity

Changing power management settings on PCs:

Control Panel → System and Security → Power Options → Change when the computer sleeps

Here you can adjust when the display dims and sleeps and when the computer sleeps. When the computer sleeps, the computer’s hard disk will spin down, which saves a considerable amount of energy, but the computer still powers RAM to preserve your files. You can adjust hard disk spin down settings separately in the “Advanced Settings” menu if desired. If you have a laptop, you can also set two different settings based on whether the laptop is running on battery or is plugged in. Other options available in the Advanced Settings menu include:

- An option to “wake for network access” to allow Remote Access, etc. The computer will wake when it senses network connectivity
- The option to set the computer to “hibernate” after a period of time, meaning the computer powers down the RAM (essentially turning the computer off) but copies everything on RAM to the hard drive so it will be preserved when the computer wakes

Changing power management settings on Macs: System Preferences → Energy Saver

Here you can adjust when the display sleeps and when the computer sleeps by using the sliding scale. When the computer sleeps, the computer’s hard disk will spin down, which saves a considerable amount of energy, but the computer still powers RAM to preserve your files. If you have a laptop, you can also set two different settings based on whether the laptop is running on battery or is plugged in. Other available options include:

- The option to spin down hard disks when the computer is idle, before it officially enters sleep mode
- An option to “wake for network access” to allow Remote Access, etc. The computer will wake when it senses network connectivity
- Display brightness and dimming options when the computer is idle