

# Energy savings from Computers

You can cut the energy consumption of your computer by nearly 30% by taking a few simple steps.

## How to save energy

Energy Star compliant computers have

various energy saving features that can automatically shut down the

monitor and the hard drive after specific periods of inactivity.

By activating the energy saving features on

your computer, you

can save energy

every time you

leave your office

or are not using

your computer.

The 'sleep'

button available on

new keyboards can

also be programmed to

manually activate an energy

saving feature.

## How much energy can be saved?

When a typical monitor is shut down, its energy use reduces to less than 1 watt (W), leaving only the hard drive using power – around 50 W.

When the system hibernates, the hard drive is shut down and total energy use of the computer is reduced to under 6 W – approximately 5% of full operating power.

The table shows the savings that could be achieved during work hours with these energy saving settings:

- "Turn off monitor" after 10 minutes
- "System hibernates" after 30 minutes.

	Consumption of one computer		Savings in an office with 50 computers		Saving
	kWh/year	\$/year	kWh/year	\$/year	%
Computer on for 9 hours per working day	238	\$31	0	\$0	0%
Energy saving features activated during lunchtime (1 hour)	221	\$29	854	\$111	7%
Energy saving features activated during lunchtime and during one 2 hour meeting	179	\$23	2,944	\$383	25%
Energy saving features activated during lunchtime and during three 1 hour meetings	169	\$22	3,416	\$444	29%

Savings are calculated using typical energy consumption for a desktop computer of 110W (CPU 50W and monitor 60W), energy costs of \$0.13/kWh and typical usage of 9 hours/day, 5 days/week, 48 weeks/year.

## Restarting

The energy saving features allow the computer to be restarted easily and quickly. Moving the mouse, if the screen is off, or pressing the "on" button, when the computer is hibernating, returns the computer to the position it was previously in, without loss of data and minimising inconvenience to the user.

## Screen Savers

Screen savers do not save energy as energy is required to display the images. Disabling screen savers and activating the energy saving settings can significantly reduce energy wastage by monitors.

Note:

- Sometimes the hibernation feature does not work if a network based program or document is being accessed by the computer.
- Energy saving features can be activated through 'Power Options' in the Control Panel. Ask your IT staff for assistance.



**Sustainable Energy Development Office**  
Government of Western Australia

## Energy Savings After Hours

A computer that is switched on constantly (24 hours/day, 365 days/year) uses around 964 kWh each year at a cost of \$125.

Switching off at the end of the day can save 726 kWh and \$94 each year. Activating the energy saving features described above can result in even greater savings.

## More information:

For more information visit the Sustainable Energy Development Office website at: [www.sedo.energy.wa.gov.au](http://www.sedo.energy.wa.gov.au)

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