Practical 5

Using practical examples, describe green computing. List and explain the steps that you take to contribute to green computing.

Ans: Green computing is the environmentally responsible and eco-friendly use of computers and their resources. It is also defined as the study of designing, engineering, manufacturing, using and disposing of computing devices in a way that reduces their environmental impact. Green computing aims to attain economic viability and improve the way computing devices are used. Green IT practices include the development of environmentally sustainable production practices, energy-efficient computers and improved disposal and recycling procedures.

Steps to contribute to green computing:

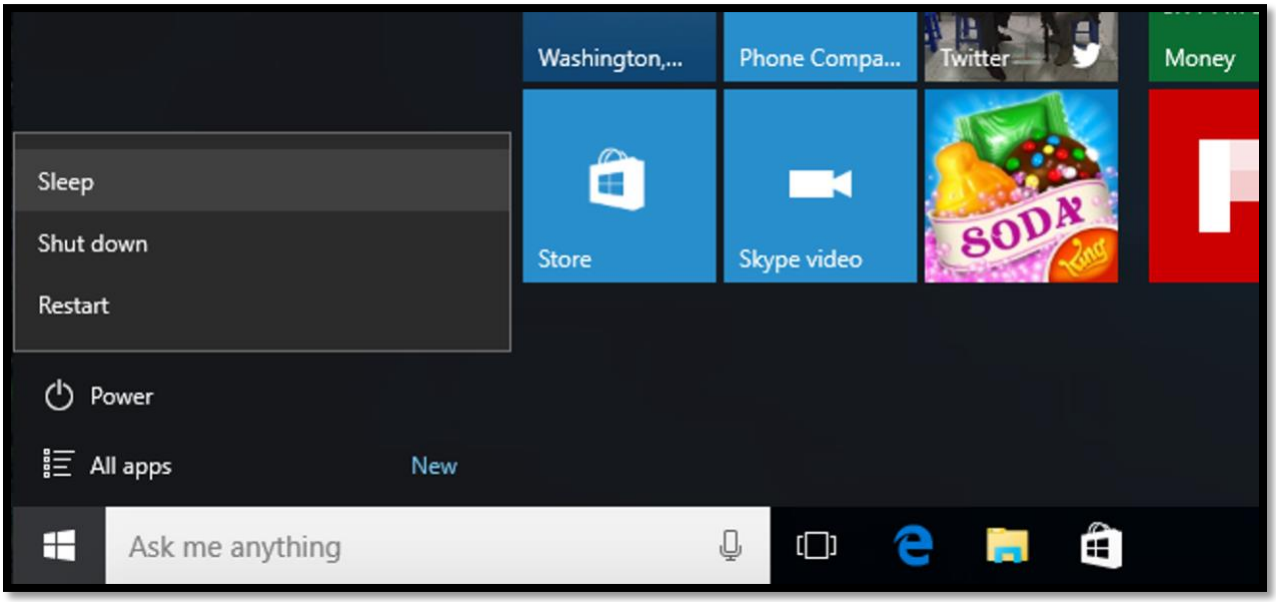
1. Purchase energy-saving hardware:

Purchasing energy-saving power supply units can save money, help the environment and they are often quieter.

Considering energy efficient products is a good way to save energy in the first place. Look for logos like the Energy Star to buy computer hardware that offers good energy efficiency. Another good idea is to look for an 80+ power supply unit which is more energy efficient as well.

You may also save energy when you buy components designed for mobile use, or components that come with extra energy saving features.

2. Power down computers while not using:



Many of us leave our computers running even when we are not using them, this leads to waste of energy. if you do not want o switch them off completely use sleep mode or hibernate, this will help save the power and keep it to its current state to use it when needed.

Many more reasons to shut down the device when not in use:

- You're in public or on an unsecured network.
- Slightly saves on your electricity or power bill.
- You don't want to be disturbed by notifications, fan noise, or blue light.
- Slow the wear of components, like the cooling fan and hard disk.
- Your house sensitive data concerned about the cyber risk of an open connection.
- Perceive value in the charge cycle of your battery.

Leaving your computer on does little damage to modern computers. However, when the computer is on, the fan is working to cool the machine's components. When it's running consistently, it will shorten the lifespan slightly. Additionally, external incidents like dropping the device or unexpected power surges while the computer is on can cause significant hardware damage or preventable data loss.

3. Use a laptop instead of a desktop:

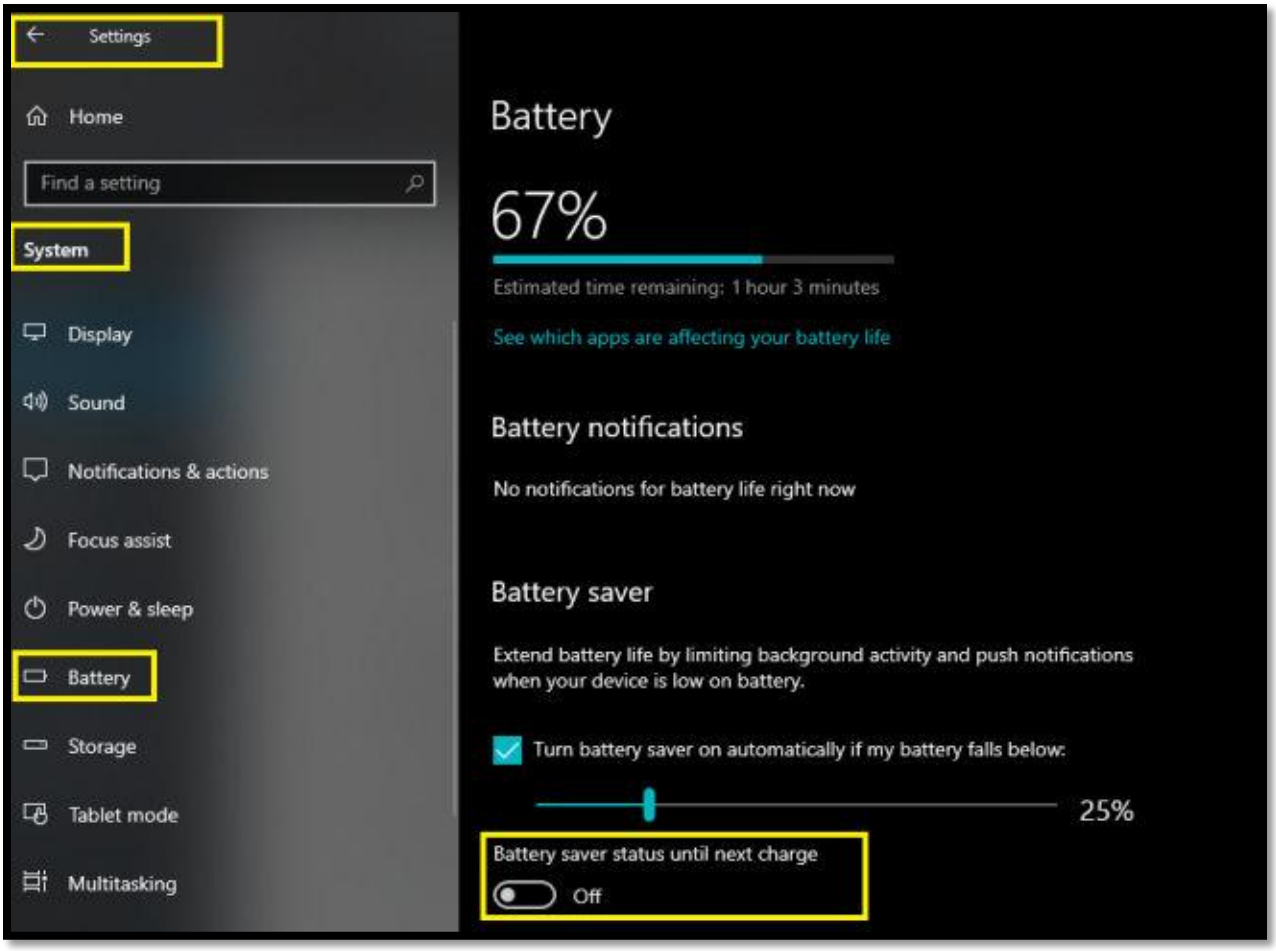
Laptops are environmentally friendly because they have components that do not require a lot of power. Use a laptop as much as you can.

A. Desktop computers use an average of 60 to 200 watts of electricity in order to run normally.

B. An uninterruptible power supply can significantly increase energy usage of your desktop model, but it's necessary in order to prevent system crashes and other significant issues during power outages.

C. Laptops use an average of 20 to 50 watts of electricity. This amount can be reduced by putting laptops in power save mode, where energy is used more efficiently. Power save mode may include a dimmer screen, decreased functions and other measures that help save electricity.

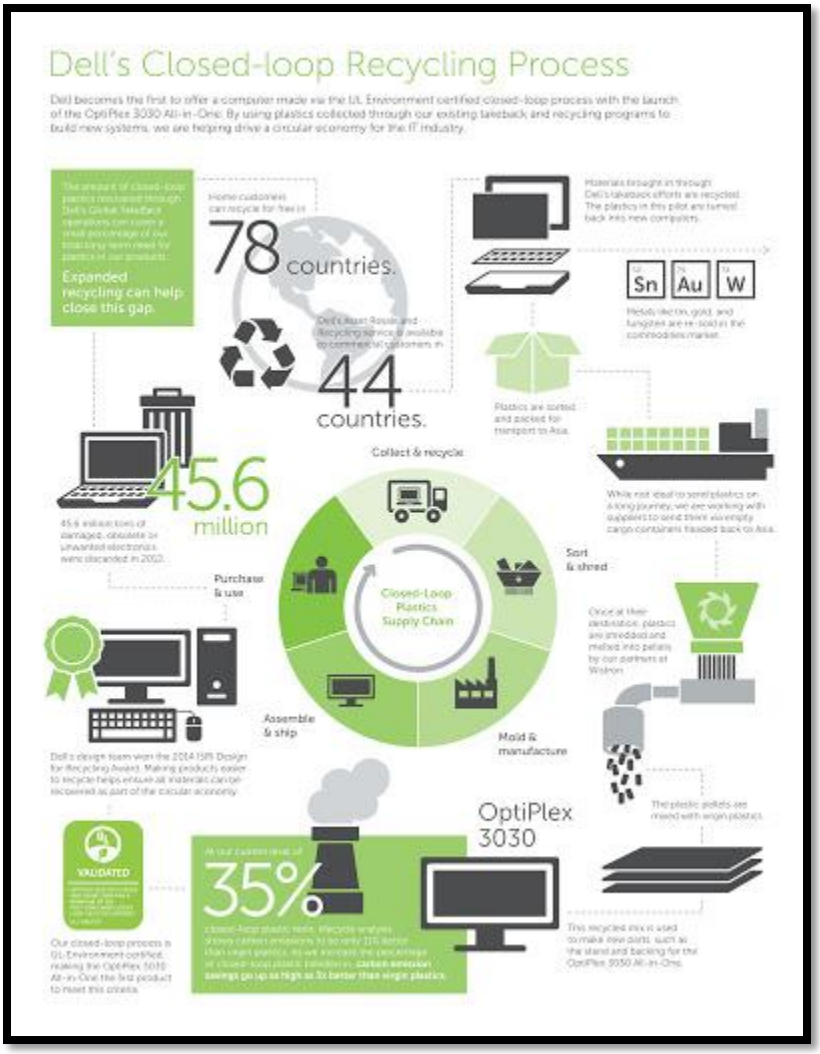
4. Use power-saving features:



These features in a computer can command the computer to do various energy-saving tasks automatically, therefore saving a lot of power.

1) It changes Device's brightness to standard brightness or changes it to automatic brightness.
2) It stops unused apps on your device.
3) It reduces the device's screen out time.
4) It will notify you to turn off your Bluetooth, Wi-Fi , GPS etc because they increase battery consumption .
5) It will notify you to turn on smart stay if you have it in your device because it saves battery .

5. Recycle responsibly:



You should check with your authority to see which companies can safely dispose of old computer parts, this because computers have hazardous particles which affect the environment.

A. Reduce: We are using more and more devices and replacing them more often. Changing this habit depends as much on the consumer — who should be less susceptible to marketing strategies that encourage consumption — as on manufacturers who are increasingly adopting policies like ecodesign.

B. Reuse: The experts in electronic recycling recommend that friends or family inherit devices that still work, or that they be offered on the second hand market. There is also the possibility of donating them to specialized charities.

C. Recycle: When the item no longer works and there is no chance of it being used by someone close, recycling should be the option. One option for the consumer is to hand the old device in to the shop where the new one is being purchased, or to some company that specializes in electronic refurbishment.