A GUIDE TO GREEN TECHNOLOGY

1. **Green Data Centers.** UCLA can make its data centers more green if we:
   a. **Meter Power Use.** To effectively manage power use, it's important to consistently measure it.
   b. **Raise Data Center Temp.** Raising the temperature can reduce both the power use and cost of air conditioning.
   c. **Recycled Building Materials.** When possible, use recycled materials to construct data centers.

2. **Telecommuting/BYOD.** By allowing employees to work remotely and/or bring their own personal electronics to work, UCLA can decrease its energy consumption by reducing the amount of on-site equipment.

3. **Conversion to Energy-efficient Monitors.** Replace older CRT monitors with LED-backlit monitors or flat-panel LCD screens, which use up to 70% less energy, are easier on the eyes, and have twice the lifespan of CRT monitors. Also, encourage employees to use laptops and tablets instead of desktops, which helps save energy.

4. **Conversion to Energy-Efficient Servers and Computers.** By switching to more energy-efficient servers and computers, departments can save money and go green.

5. **Reduce Paper Consumption.** A few ways to reduce paper use include:
   a. **Use Technology.** Encourage employees to use cloud services, such as Box and Google Apps, as well as electronic communications to share documents instead of printing out hard copies. Hold paperless meetings, and have employees bring their devices to take notes.
   b. **Duplex Printing.** Print on both sides to cut costs and reduce paper use.
   c. **Reuse Paper.** Encourage employees to recycle and reuse paper use.

6. **Cloud Computing.** Cloud services are both cost efficient and eco-friendly. Using cloud services will allow departments to spend less money on hardware, software and maintenance. Internal and external Cloud options are available for UCLA.

7. **Use Voice Over IP Instead of Traditional Phones.** VoIP utilizes the internet (instead of traditional phone lines) to send and receive voice communications and multimedia sessions. VoIP is available on a case-by-case basis. Visit [https://www.it.ucla.edu/network-phone-tv/phone-service/voice-over-internet-protocol-voip-services-at-ucla](https://www.it.ucla.edu/network-phone-tv/phone-service/voice-over-internet-protocol-voip-services-at-ucla) for more information.

8. **Server Virtualization & Consolidation.** Server virtualization is the idea of using virtualization software to partition a physical server to that it appears as several “virtual servers,” each of which can run their own copy of an operating system. Virtualization can help UCLA reduce energy consumption, since there are fewer physical servers using power. Also, consolidating the server by creating a centralized storage network will help UCLA reduce the amount of hardware it needs. Server consolidation will ultimately help UCLA cut costs and maximize ROI.

9. **Virtual Desktops:** Restructure computing stations to include virtual desktops that are connected to centralized servers. This will require less hardware and also cuts costs.

10. **Reduce Electronic Waste.** Before disposing of old computers and computing supplies, like printer cartridges and batteries, consider other ways you can use them. For example, you could salvage computers for parts to do hardware repairs or donate old computers to needy families. Recycling computing equipment will also keep dangerous materials, such as lead, arsenic and boron, out of landfills.