A Video Tutoria Eon Green 10 University of Southampton, ECS, INFO2009 Academic Year 10 - 11

Abstract

Climate change has always been one of the most discussed topics in the world. Several studies have addressed the impact of the IT industry to the environment. In this video, we will introduce a movement towards designing environmentally friendly IT products.

Introduction

The video will give you a brief definition of Green ICT, some of the widely used approaches to green computing and legal issues related to this field. There is also an example which we take from our familiar place - the computer lab at Zepler building of Southampton University.

Background

There are countless electronic items around the world, from computers, TVs, to mobile phones. They will likely to be replaced every few years. However, what will happen to the old items?

Electronic items contain many contaminants sch as lead, mercury, cadminum, and materials that have a very slow degration rate like plastic. When improperly disposed, they will become a large environmental threat. This leads to the introduction of Green ICT and green computing concept.

Methods

Two methods of gathering information were used regards the completion of the project:

Primary research (or "Zeplar Case study"):

Using a camera with high definition video recorder to address some of the green ICT issues and approaches occurring in Zepler computer lab

Secondary research:

Developers and scientists with strenuous efforts studied and addressed Green ICT issues in conferences and academic papers to help individuals, governments and organizations to set legislations and to make contributions to reduce climate change and increase energy efficiency usage. A number of of these resources were used in assembling the "Green ICT" video and they were appropriately acknowledged and referenced.

Discussion

In the fast paced, get-it-done yesterday, world we live in, we tend to forget about the impact of our actions on the environment. When we slow down, we realise what we have done, but sometimes it is too late. This is why we need to be proactive in our efforts to preserve the environment and make in formation, communication, and technology products more energy efficient. If we do nothing, sit back, and let the current practices continue, all of our natural resources will be gone.

Conclusion

Green ICT is a movement towards efficient resourse use and decreased waste of electronic products. Harmful chemicals, long bio-degrading times, and pollution are destroying the environment and the Green ICT movement is helping to curtail these negatives. The movement is going strong, but it needs more support from the general public. Some things you can do are: unplug appliances when they are not in use; recycle old elec tronics properly upgrade rather than buy new; buy Energy Star rated products; and be aware of the products you buy and the actions you take. Every little bit hepls, and in the world we live in, we need a lot of help.

References

Blinder, W., Suri, N., 2009, Green computing: energy consumption optimized service hosting. In Theory and Practice of Computer Science. Spindleruv Mlyn, Czech Republic, 24-30 January 2009. Berlin, Germany: Springer, pp. 28-117.

Jesse, S, 2008. Making IT a Positive Force in Environmental Change. IT Professional, [Online].vol.10, no.1, pp.43-45. Available

http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=444 6675&isnumber=4446663 [Accessed 03 March 2010].

Murugesan, S., 2008, Harnessing green IT: principles and practices. IT Professional, 10 (1), pp.24-33.

Murugesan, S., 2007, Going Green with IT: Your Responsibility toward Environmental Sustainability, Cutter Business—IT Strategies Executive Report, vol. 10, no.8, 2007.

Talebi, M., Way, B., 2009, Methods, metrics and motivation for a Green computer science program, SIGCSE Bulletin, vol. 41, no. 1, pp.6-362.

For a full list of references please visit our resources.

Keywords: Green ICT, green computing, energy efficiency, green solutions, virtualization, e waste



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