OVERVIEW OF GREEN COMPUTING AND E-WASTE: THE CASE OF TURKEY

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ABSTRACT

The issues of sustainable ICT (Information and Communication Technology) and green computing have become much more important for business firms during the past several years. Green computing is defined by Murugesan (2008) as “the study and practice of designing, manufacturing, using and disposing of computers, servers, and associated subsystems – such as monitors, printers, storage devices, and networking and communications systems – efficiently and effectively with minimal or no impact on the environment.” Therefore, green computing issues are understandably complex because of the variety of technologies and processes involved and also of their interdependencies among various components. The aims of green computing are to protect the environment, to reduce energy consumption and greenhouse gas footprint. In emerging economies such as Turkey, economic growth leads to higher intensity of ICT usage and therefore, increasing the environmental impacts. There also has been an increasing number of laws and regulations dealing with environmental issues and in green computing in particular that businesses have to deal with. For example, a new e-waste law in Turkey which was inspired by the EU e-waste regulations will be effective in May of 2013. It brings responsibilities of e-waste collection and education for the public by manufacturers or importers of the electric and electronics equipments such as computers and peripherals. In this study, green computing issues are summarized including the review and analysis of green computing in general and green computing initiatives in Turkey in particular. We try to raise the awareness for businesses and individual consumers of ICT of an increasingly important issue of green computing. Businesses should have a sustainability strategy to transform its operations in order to reduce their carbon footprints. For them, being greener is not only in their interests in terms of lower costs but also for their social responsibilities.

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REFERENCES