### AMCIS 2010 Minitrack

# Sustainability, Information Systems and Technology: Emerging Opportunities for Information Systems to improve sustainability within organizations

### Mini-Track for the track "Emerging Issues in IS Research"

#### Theme:

The continuous growth of the World population and the increasing demand for higher living standards has lead to the exploitation of natural resources and the pollution of the environment on an unprecedented scale. Shareholders, regulatory bodies, customers and employees are increasingly demanding firms to adopt a systematic approach to the sustainable management of increasingly scarce resources while at the same time reducing their impact on the environment. Environmental management is more than ever an imperative in industrial domains such as manufacturing, logistics, agriculture, forestry and IS & IT, which has become pervasive throughout entire organizational functions and processes.

In the emerging fields of Green IS and Green IT, a figure of 2 percent is often quoted as the percentage of environmentally harmful emissions attributed to the use of IT and the IT industry. The term 'Green IT' is now part of our vocabulary recognizing the problem of IT as a polluter and the responsibility of IT professionals to do something about it. On the other hand there is a counter argument that in IT and IS we have the potential and opportunity to positively influence the global environmental future – in other words, develop Green IS to reduce the other 98%. This sentiment is reflected in a chapters<sup>1</sup> developed as part of the Global Text Project. Here the term 'Green IT' is distinguished from 'Green IS'. 'Green IT' is seen to focus mainly on energy efficiency and equipment utilization. 'Green IS', in contrast, refers to "the design and implementation of information systems that contribute to sustainability of business processes". Green IS as so described should therefore have a greater potential than Green IT because it tackles a much larger problem.

IS can play a key role in making organizations more sustainable while at the same reducing the negative environmental impact of IS and associated IT infrastructure. Hence this mini track will focus on the role that IS can play in these two interrelated issues of Green IT and Green IS.

The purpose of this mini-track is to advance theoretical and practical knowledge in this emerging domain and to gain a better understanding of current industry initiatives and academic research being conducted on the role of IS in business sustainability. Hence submissions of high quality papers that report on empirical research and case studies including but not limited to following topics are sought:

# Sustainability and Green IS

- The role of IS in sustainability reporting such as Emission Trading Systems
- IS for the management of environmental risks
- IS for sustainable supply chain management
- Active environmental data warehouses
- IS for the management of energy grids
- Sustainability and innovation in IS
- IS facilitating and monitoring systems
- Carbon Calculators
- Greener ways of working

<sup>&</sup>lt;sup>1</sup> Boudreau M. Chen A. Huber M. (2008) Green IS: Building Sustainable Business Practices a chapter in Richard Watson ed. Information Systems: Global Text Project http://globaltext.terry.uga.edu/.

- Optimising Processes for lower energy use and emissions
- Green BPM
- Meeting virtually, travelling less
- Sustainability and Green IS themes in the IS curriculum
- Case studies: companies and organizations using Green IS and Green IT to support sustainable business practices
- Green HCI How Energy consumption feedback systems can reinforce sustainable practices

# Sustainability and Green IT

- •e-waste
- Greener Data Centres
- Green Virtualisation / Cloud Computing issues
- Becoming Paperless
- Green IS metrics
- Sustainability performance management for IS organizations
- End-user working practices
- Energy efficient office environments
- Virtualization and cloud computing
- Lifecycle analyses of IS resources
- Standards and key performance indicators to measure the performance of IS resource management
- Technology recycling
- Incentive systems and processes for efficient IS resource management
- Innovations in green computing technologies
- Theories and methods applied in Green IS initiatives
- Consumer and practitioner awareness and response to green computing
- Embedding and teaching sustainability concepts and practice in Information Systems programs and courses
- Industry specific challenges and opportunities.
- Nontraditional energy approaches for sustainable information systems.
- Mobility and sustainable information systems.

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