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## Greening Your I.T.

By Michael Randel

Do you know the economic and ecological impact of all the I.T. equipment in your organization? This includes the hardware (desktops and servers), as well as the costs of powering and cooling all this equipment. Do you know what you might do to reduce the cost of these, or to minimize the ecological footprint they will otherwise create?

A Washington D.C. organization is helping non-profits figure out some insights to these questions. Community I.T. Innovators (C.I.T.I.) has been supporting non-profit organizations for the last 15 years, and has recently expanded its sustainability consulting services to help organizations tackle these tough questions. They held a seminar in June 2008 to introduce some ideas and initiatives to their clients.

The internet has had a positive impact on many aspects of organizational life – enabling outreach, brand building, development, education, and collections management. However, the energy used by servers and the data centers housing them (for power and cooling purposes) doubled between 2000 and 2006.

By paying proactive attention to your IT services, you can make a large impact on your organization's 'green' line and sees benefits such as:

- **Reduce Costs:** Reduce your power requirements for running and cooling machines. Reduce the need to replace desktop equipment as frequently. Make better use of existing IT infrastructure.
- **Reduce environmental impact:** Reducing power usage can reduce the carbon footprint by requiring fewer carbon-based energy sources. Alternative energy sources can be carbon-neutral.

C.I.T.I. introduced three ideas for organizations to consider:

### 1. Conduct a "Green Power Inventory"

Do you know how much your IT infrastructure costs the organization, in terms of the monthly cost of providing power and cooling? A "Green Power Inventory" is an assessment tool that identifies the total power requirements for running your IT equipment, calculates the monthly costs of buying this power from the utility, and assess the environmental impact of this power purchase (as few utilities are using renewable resources to any significant degree).

The benefit of the assessment is that will expose the organization to the real costs of its IT infrastructure. This encourages staff to take responsibility for their purchasing recommendations, and encourage them to explore options that are more economically and ecologically beneficial to the organization and its stakeholders.

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### 2. Consider introducing 'thin client' computing

"Thin Client Computing" refers to an IT model in which a central network server meets all the processing requirements of 'remote' clients. For many organizations, this means that the computers on a desk are not running applications and files from a local hard drive, but instead are accessing the network for applications as well as documents.

There are a number of benefits to this approach. The remote clients never need upgrading, as this is handled by the network. Fewer machines are required across the organization, and all staff have access to the same experience. Also, it is possible that less power will be required, leading to both economic and ecological benefits.

### 3. Explore 'Green Hosting' services

These are web-hosting services that aim to minimize the carbon consequences of the internet by using alternative energy sources.

Green hosts might either use renewable resources or make use of power off-sets (such as renewable energy credits).

While the renewables are not yet a proven technology, it is rapidly maturing, and offers some promising benefits in the future.

For more information about these approaches for greening your I.T. operations, contact  
Michael Randel [mikerandel@earthlink.net](mailto:mikerandel@earthlink.net)  
or visit [www.qm2.org](http://www.qm2.org)