

Saving the world, one server at a time



Lori MacVittie, 2008-15-08

Green IT is a fairly well hyped topic at the moment. While the term may be seen as hype, there are tangible benefits to employing green tactics within IT. Even research firm Gartner sees it as one of the hyped technologies organizations can use now to see real benefits.

Jackie Fenn, vice-president and Gartner Fellow on green IT via [The Standard](#)

Another set of technologies that's benefit to companies now is green IT, which is valuable in more ways than one, Fenn said.

"The happy thing about green IT is that the greater good is aligned with the selfish benefit of saving money," she said.

But how much money are you *really* saving? And how much good are you doing at the same time? It's nice to say "it can" but wouldn't it be nicer if you could quantify how much good and how much money this concept might actually save? A hosting firm with an albeit good reason to dig into the subject, claims from a study that web servers produce an excess of 632kg of CO2 annually by wasting 1000 kWh of energy.

From another article via [The Standard](#):

Hosting firm Amenworld says web servers are needlessly wasting energy and contributing to excessive CO2 emissions.

The company's study of over 3,500 dedicated servers found that on average servers needlessly used 1000 kWh of energy, producing an excess of 632kg of CO2 per server per year.

"Like other industries, the hosting industry has a role in the global effort to reduce levels of carbon dioxide emitted into the atmosphere," said Amenworld's U.K. country manager Olivier Djidjelli.

But how do you change that? [Virtualization](#)? Sure, maybe. Consolidation? That's most likely the best tactic, but you can't sacrifice performance and availability in order to achieve that goal.



Let's say you have 10 web servers and you'd like to get down to half that number so you can save 5000 kWh a year *and* reduce your CO2 emissions by 3160kg a year. As a comparison, the average two-person household in the US wastes (by not recycling, etc...) about 2000kg worth of CO2 a year.

So how do you reduce that waste? Well, you could [start with application acceleration](#). I know this concept still sounds crazy, but here's a real-life example.

[Ritz Interactive](#) deployed the [BIG-IP WebAccelerator](#) and decreased server use by 50 percent. As a bonus, use of BIG-IP and WebAccelerator decreased download times by 20 percent, and reduced bandwidth usage from 20 to 50 percent. You can

read more about their experience [here](#).

Essentially, Ritz was able to make their applications *faster* while reducing the number of servers required to maintain availability for all their web sites. That means they've reduced, by half, their CO2 emissions and their wasted kWh. Consolidation, if they chose to do so, would allow them to reallocate those resources elsewhere or simply remove them entirely from the picture.

No matter why you're buying into Green IT (save the planet, save some cash) there are benefits to everyone. Aside from the obvious reduction in waste, there's also a simplified application infrastructure, which is necessarily easier and takes less time to manage. Fewer servers means fewer patches, fewer installs, fewer problems.



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