

ENVIRONMENTAL CREDENTIALS

In 2012 the New York Times commissioned a survey about [energy usage and the Internet](#). The shocking result was that worldwide data centres continuously consumed about 30 billion watts of electricity which is equivalent to the output of about thirty nuclear power stations.

“It’s staggering for most people, even people in the industry, to understand the numbers, the sheer size of these systems,” said Peter Gross, who helped design hundreds of data centers. “A single data center can take more power than a medium-size town.”

A few companies say they are using extensively re-engineered software and cooling systems to decrease wasted power. Among them are Facebook and Google, which also have redesigned their hardware. Still, according to recent disclosures, Google’s data centers consume nearly 300 million watts and Facebook’s about 60 million watts.

These statistics were published in 2012, when the cloud was far less entrenched than it is now, and very little progress appears to have been made in improving these figures. Although lower power silicon disks are available they do not appear to be used as frequently as conventional wasteful rotating disks in data centres because of their relatively higher purchase cost.

In designing [Railton Consultants servers](#) we use silicon disks as standard and have selected only the most energy efficient processors to minimise energy wastage further.

We help users to reduce their energy costs by advising clients on how they can minimise on-line storage use. As far as we know this is a unique service within an industry whose normal technical answer to problems is simply to 'get a bigger one' regardless of the impact.

The conventional IT industry focuses on forcing upgrades and selling new hardware to replace still working systems regardless of the impact. From a client perspective these upgrades are disruptive and unnecessary when the hardware is still operating. As part of Railton Consultants 'Sustainable Software' principle we attempt to support our clients' servers for as long as possible by ensuring software continues to operate. As a result, clients are not forced into needless hardware upgrades [which have a very significant environmental impact](#). Again, we think this is a unique approach to software support, which has a very positive environmental impact by reducing hardware wastage.

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