

## Including power as part of your ROI calculations

It has become evident over recent years that the cost of running an IT Infrastructure goes well beyond the cost of acquisition and manpower, and increasingly includes the cost of powering the Servers and Systems that comprise the IT solution.

The move toward a more consolidated or virtualised infrastructure has certainly played its part in realising cost savings in their own right. However, the cost associated with powering the client end is often left out of the equation. This is certainly an area where, in many cases, an organisation can look to both save money whilst reducing their carbon footprint.

Many organisations have already taken this opportunity to start the migration to a Thin Client Computing Environment, and have found they have augmented cost savings in power consumption by a reduction in management time.

If we take as an example a local Health Board who recently acquired some 400+ Thin Client Terminals and the rationale behind the decision. In this case the additional benefits were almost as compelling as the saving in power

*“Thin clients offer security in the sense that it is centralised so the clients are effectively dumb/stateless and don’t store user information or files. This is further enhanced by the use of Linux based clients which generally don’t allow access to client system drives at all”*

*Igel Terminals were chosen client as they are small footprint, lower power consumption than the average PC (no HDD, low power CPU), quick to boot up (a lean OS) with minimum risk of malware. and the additional benefit that settings are centrally controlled.*

*With Igel Terminals in particular the power settings can be further tweaked to go into standby or even shutdown after a preset idle time. Although this is also true of PCs - generally there is a move towards power saving across all IT equipment.*

It is evident from the following that the potential saving on power and the reduction in your carbon footprint, could be considerable.

CO <sub>2</sub> wastage with server share	Thin Client	Thin Client with Server pro rata + server cooling	PC
Power Consumption	16 W	41 W	85 W
X 8 hours per day	128 Wh	328 Wh	680 Wh
X 220 days a year	28 KWh	72 KWh	149 KWh
CO <sub>2</sub> for 1 workstation per year	17.64 kg	45.36 kg	93.87 kg
CO <sub>2</sub> for 10 workstation per year	176.4 kg	453.6 kg	938.7 kg
CO <sub>2</sub> for 100 workstation per year	1.76 t	4.54 t	9.39 t

**Looking to reduce your Carbon Footprint?  
Contact Computerworld Wales—your Green Computing Partner**



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