

IT through the looking glass

Iceotope were the platinum sponsors of the 2012 EAUC Annual Conference



Wouldn't it be strange if we considered that a computer is actually one of the most efficient ways of turning electricity into heat and the computer portion is, in reality, waste? Yet the vast majority of 'IT consumers' hold the counterview, that the heat generated is waste and vast amounts of additional energy should be expended to cool and blow the problem away.

What would happen if we considered the heat an asset? How would that change our thinking? Perhaps the heat could be harvested and repurposed or "in extremis", disposed of as effectively as possible.

Given that IT is now an essential component of university life, from administration through to research, doesn't it make sense to consider its impact holistically and extract the maximum benefit possible from the resources deployed? Yet at the moment, because of the current paradigm of air cooling, millions of pounds are being spent across the sector on the infrastructure that provides the

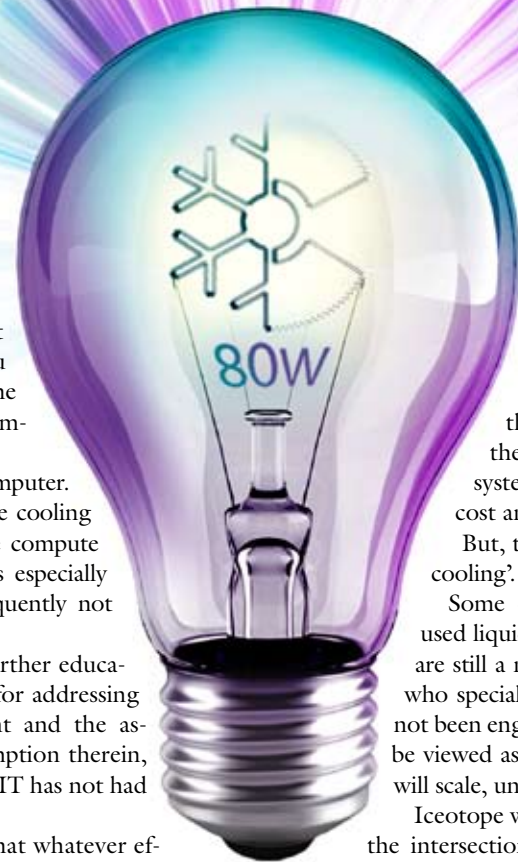
operating environment (the data centre if you will) rather than on the computing systems themselves.

Take any new supercomputer. As much is spent on the cooling infrastructure as on the compute and the operating costs especially the energy bill are frequently not properly understood.

Within higher and further education there is a passion for addressing environmental footprint and the associated energy consumption therein, however in some cases IT has not had the same focus.

It also seems to be that whatever efforts to improve efficiency have been made, those efforts have tended to be in the margin rather than looking at disruptive technology to effect real change.

Just 80W to cool 20kW of IT!



Let's face it. The ability to offer 'free air cooling' for a percentage of the time, still requires all of the infrastructure of a closed system for the rest, meaning cost and complexity abound.

But, there is a solution – 'liquid cooling'.

Some of the earliest computers used liquid to cool IT. In fact, there are still a number of niche providers who specialise in this, however it has not been engineered in such a way as to be viewed as a commodity option that will scale, until now.

Iceotope was established to focus on the intersection of IT and cooling and to explore how this could be done more effectively. We use industry standard IT, safe and sealed 'liquid cooling' and advanced fluid dynamics to deliver a system that efficiently harvests the heat in order to provide the optimum working temperature for IT and deliver it through heat exchange technology to facilities for re-use in building systems or passive disposal.

Saving space and cost, our elegant solution is designed, engineered and manufactured in the UK. It reduces the energy required for the same amount of compute by 50 per cent, requires no complex or expensive infrastructure, is silent in operation and is simple to operate, support and maintain. Finally, our solution delivers the best performance for the lowest watt of any solution on the market today which equals more compute for less! ●

To find out more about how Iceotope can help your organisation visit www.iceotope.com

Learn more about the EAUC Annual Conference



We would like to say a big thank you to all our sponsors and exhibitors for supporting the conference and making it one to remember.

With over 370 delegates, the 2012 event was our most successful Conference yet with representatives from all levels of the further and higher education sector in the UK and beyond coming together to learn, network and share their sustainability experiences. If you attended the Conference and would like a reminder or if you were not able to make it this year but want to learn more, the presentations, workshop materials, photos and are much more are available on the EAUC website www.eauc.org.uk/annual_conference.