

<http://www.computing.co.uk/ctg/news/2115638/uk-firm-carbon-neutral-datacentre-iceland>

## UK firm opens carbon neutral datacentre in Iceland

by [Sooraj Shah](#)

10 Oct 2011

A carbon neutral datacentre has opened in Keflavik, Iceland, which the owner, UK-based Verne Global, claims is the first of its kind.

The company claimed it provides a Power Usage Effectiveness (PUE) quotient of almost one. It said it expects the datacentre, manufactured by information delivery platform Colt, to attract European and US [companies](#) as it is cheaper and more eco-friendly than similar datacentres.

The PUE is determined by dividing the amount of power entering a datacentre by the power used to run the computer infrastructure within it. PUE is expressed as a ratio, with overall efficiency improving as the quotient decreases towards one.

"If you offer an enterprise two datacentres at the same price, the enterprise would always pick the eco-friendly one," said Jeff Monroe, chief executive of Verne Global.

The centre will use Iceland's dual-sourced renewable energy (hydroelectric and geothermal) power grid in addition to the free cooling from the Icelandic cold air.

IT and cloud computing services firm Datapipe will be the first customer of the datacentre. Robb Allen, chief executive of Datapipe, said he believes the position of the datacentre between the UK and the US, which are the two largest financial markets in the world, offers significant [business](#) benefits, in addition to the low price and the fact that it uses renewable energy.

Monroe said that, on average, at least 60 per cent of the cost of running a datacentre in the UK comes from power consumption, adding that companies using Verne Global's datacentres will save "in excess of 50 per cent".

Competition over reduction in power consumption has become increasingly intense. The [UK's CRC Energy Efficiency Scheme](#) is just one of many country-specific cap-and-trade schemes that forces companies to reduce their carbon output.

The government hopes the scheme will reduce carbon emissions by 1.2m tonnes of carbon per year by 2020.

Among the companies in the race to reduce emissions is Facebook, which has its own energy-efficient datacentre, created through its [Open Compute Project](#). It achieves a PUE of 1.15 by using a highly efficient cooling system.

The datacentre uses 38 per cent less energy at 24 per cent less cost than its predecessor. Facebook has shared the [design](#) of the datacentre with its competitors.

In April, Rick Bakken, senior director of datacentre evangelism at Microsoft, said that [Microsoft plans to reduce the average Microsoft data centre PUE to 1.25 within two years](#).

Verne Global said its PUE will be as near to one as possible but it does have a competitor, as Reykjavik-based Thor uses similar technology to save power consumption and costs.

A [report](#) by Jonathan G Koomey, a consulting professor at Stanford University, found that datacentres are actually using less energy than predicted a few years ago, crediting innovative cooling systems and virtualisation technologies as the reason.

So why don't more cloud providers move their datacentres to Iceland? Monroe conceded that companies may want servers nearer to their headquarters for easier access. In addition, legislation on data storage outside a country may prevent companies with sensitive data and security concerns around this from storing their data overseas.