



Hydro66 delivers agility without the carbon footprint



[Hydro66](#) is a new pure colocation provider that offers highly secure but fully flexible space on flexible terms. Contract terms are designed to be easy in/easy out and private data halls are fully tailored to client specifications.

Hydro66 space options range from individual racks to private suites and entire data halls. There are 14 data halls in total which cover 500m<sup>2</sup> each and clients can opt for standard or vendor-customised racks.

Power density options come in at between 5 and 20kW per cabinet and by 2016 the entire facility will have access to 200MW thanks to its location at the crossroads of four regional power grids. Hydro66 is fully redundant but clients can specify individually to what extent they need extra UPS and standby generators - with the option to leave them out and save on costs. Customers can also choose whether to have single or dual power feeds to equipment, again with resulting cost reductions.

Connectivity options at Hydro66 are comprehensive. With notice, Hydro66 can offer a 10Tbps+ but standard connectivity options available immediately cover IP transit or between 1 and 100Gbps connections to carriers all over Europe. The facility is carrier neutral but can also provide a managed network service to tenants as an additional option.

Value added services offered by Hydro66 include VirtuallyThere (remote hands), WeShip (equipment transport) and OnSite (client controlled remote monitoring).

## **Location**

Hydro66 Svenska AB is headquartered in London and owns one carrier neutral data centre in Boden, Sweden. The Boden facility was opened in October 2015 and is the world's first ever hydro-powered data centre. It is located adjacent to the Luleälven River which provides the power via a 70MW Hydro- power station and is just half an hour away from the Facebook data centre.



Access to the Hydro66 facility is highly secure, with two-stage biometric identification to servers, airlock access to the inner workings, always on CCTV and manned patrols and an extensive alarm system. Fire and leak detection and suppression technology is of the highest standards.

## **Energy**

Hydro66 was opened in October 2015 as the world's first hydro-powered data centre in Boden, Sweden. The data centre uses zero carbon energy and utilises Free Air Cooling technology, taking advantage of the cool Swedish climate. Supplementary mechanical cooling is only required for a few days per year and is powered by hydroelectricity too although no chemical refrigerants are used at any time. These measures mean that the Hydro66 facility has a staggeringly low Power Usage Effectiveness rating (PUE) of less than 1.05 - one of the lowest figures in the world.

## **Funding/business model**

Hydro66 Svenska AB is a subsidiary of the private UK registered company Hydro66 UK Limited. It is a sister company to bitcoin mining company Megamining Ltd, and the Hydro66 facilities will in part provide the data centre capacity required to run the Megamining business. All of the companies within this group are headed by David Rowe, the founder of Easynet which was sold to BskyB for more than £200 million in 2005.

Hydro66 is private equity funded by sister company Black Green Capital. The original cash injection was almost £7 million in 2014 and the company hopes to invest £50 million over the next five years to expand up to 86,000 sq. ft. All finances will come from private funds with no debt.

## **Customers and partners**

Scandinavia is an attractive location for data centres thanks to its cool climate and low latency connectivity with mainland Europe. The challenge for Hydro66 will be securing British and Western European clients, a challenge that existing Sweden-based data centres have yet to overcome.

Having opened at the very end of 2015, Hydro66's main customer is its own bitcoin mining business, MegaMining. However, the end of the Safe Harbour agreement, which was abolished in October 2015 by the European Court of Justice, could open up the European data centre market to American companies that need Europe-based data centre facilities to



Hydro66 delivers agility without the carbon footprint

store the data of their European clients.

### **A radical new data centre prospect with just one big hurdle**

Hydro66 will hold enormous appeal to new generation tech start-ups and bigger companies looking to reduce their carbon footprint and data centre costs at the same time. Hydro66's biggest weakness is also its strength - location. Even with low latency connectivity, many British businesses have lots of choice already in the UK, much of it Carbon Neutral. Hydro66 is a fantastic new concept, but whether it can attract tenants from amongst its target British businesses is another matter.