

# Case Study: Iceotope

Simulating Cooling Technologies to Prove Cost Savings and Efficiencies



## Key Information

### Client

Iceotope produces energy-efficient liquid cooling technology for data centre servers

### Quick Facts

Client since: 2015  
Geography: EMEA

### Services

Energy Modelling, Total Cost of Ownership Analysis

**“CBRE | Romonet has many years of data centre and equipment simulation experience and has modelled hundreds of data centres—exactly what we needed. Their simulations are tested against true measurements; as a result, they deliver extremely accurate simulations.”**

Peter Hopton  
Iceotope Founder and CEO



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## Challenge

Iceotope, the producers of cutting-edge liquid cooling technology for data centre servers, needed to attract further capital in order to continue developing its products and efficiency capabilities. To secure investors, Iceotope was charged with demonstrating that it provided superior energy and cost efficiency benefits compared to high-density, air-cooled systems commonly used in High Performance Computing (HPC) data centres.

## Solution

Iceotope retained CBRE | Romonet to accurately model and predict the effectiveness of its cooling technology. CBRE | Romonet simulated data centre energy use and costs using both Iceotope’s technology and a number of traditional air-based cooling technologies. The team also simulated a traditional hot/cold aisle data centre cooling system to provide a suitable ‘baseline’ and simulated rack exit door and in-row cooling systems. CBRE | Romonet then delivered a comprehensive report analysing the cost over time of each technology and illustrating in detail exactly how the simulation had been created.

Iceotope’s technology proved to produce cost savings more than three times greater than other efficient air-cooling methods, cutting the cost of the scenario data centre by 32%. Armed with this proof of concept, Iceotope could demonstrate the validity and potential profitability of its technology to investors.

**“We knew we had developed a great product, we just needed the proof-points. CBRE | Romonet are quite simply the best at what they do, so they were automatically our first choice.”**

**“CBRE | Romonet’s report has been a key element of our funding: it’s safe to say that its expertise has opened doors for us. Iceotope secured funding to continue its development: a \$10 million investment.”**

Peter Hopton  
Iceotope Founder and CEO