

## Microsoft sinks data centre off Orkney

**Notes & Cues:****Article:**

Microsoft has sunk a data centre in the sea off Orkney to investigate whether it can boost energy efficiency. The data centre, a white cylinder containing computers, could sit on the sea floor for up to five years.

“We think we actually get much better cooling underwater than on land,” says Ben Cutler, who is in charge of what Microsoft has dubbed Project Natick. “Additionally because there are no people, we can take all the oxygen and most of the water vapour out of the atmosphere which reduces corrosion, which is a significant problem in data centres.”

There has been growing concern that the rapid expansion of the data centre industry could mean an explosion in energy use. But Emma Fryer, who represents the sector at Tech UK, says that fear has been exaggerated. “What’s happened is we’ve had the benefit of Moore’s Law,” she says.

The continued advances in processing power have made doom-laden predictions look foolish, Ms Fryer says. Nevertheless, she accepts there is a challenge as the industry continues to expand and she welcomes experiments such as Microsoft’s.

Another expert is not so sure. Prof Ian Bitterlin, a data centre consultant for nearly 30 years, is sceptical about the environmental impact of going underwater. “You just end up with a warmer sea and bigger fish,” he says

Ben Cutler insists the warming effect will be minimal. “One reason we do different types of research into data centres is to learn what makes sense before we decide to take it to a larger scale,” he said.

Now, the Project Natick team will monitor the data centre for the next five years. It could turn out to be a signpost to the future - or maybe just a tourist attraction for passing fish.

**Summary:**