

Databarracks' case study

# **BUILDING A RESILIENT AWS ENVIRONMENT FOR THE UK EMISSIONS TRADING SCHEME**

About UK Emissions Trading Scheme

A UK Emissions Trading Scheme (UK ETS) replaced the UK's participation in the EU ETS on 1 January 2021.

The 4 governments of the UK have established the scheme to increase the climate ambition of the UK's carbon pricing policy, while protecting the competitiveness of UK businesses.

## The Challenge

As a result of leaving the EU, the UK had a requirement to develop its own programmes and schemes to replace EU counterparts it previously participated in. A UK Emissions Trading Scheme was required to replace the EU ETS.

Tahir Mahmood is the Technical Programme Manager for Emissions Trading at the Department for Business, Energy and Industrial Strategy (BEIS).

“We were working to a relatively short deadline to create the new platform, test and launch for the beginning of 2021. We needed to develop the ETS itself, and also decide where we would host it. There were a number of different options available from data centres to the Public Cloud.

“Working with our application developers and suppliers we assessed the requirements to see what the best fit for the system would be. The Government Digital Service recommends that use open technologies and limit vendor lock-in where possible. As a result of all these factors, we chose Amazon Web Services.

“Our first step was to get recommendations for architecture and create a Test and Dev environment in AWS. There were not any central BEIS IT resources available, so it was recommended that we try the Digital Marketplace and G-Cloud to source DevOps resources.”

BEIS carried out its searches and assessment on the Digital Marketplace, compiling a short list for further investigation before selecting Databarracks in April 2020.

“I have used the Digital Marketplace to select suppliers in the past, but not for this kind of DevOps expertise. We set our criteria based on value for money and quality, assess the qualifying services and make our selection. The Digital Marketplace means we can award a contract and get started relatively quickly. There is a good balance between making sure public money is being spent wisely and providing latest industry standard robust solutions for such a project. It also serves as a fair and open process, levelling the playing field for smaller suppliers to compete with much larger businesses for government projects.”

**“I was very impressed with the speed that Databarracks were first able to supply our Design documentation and to then start provisioning the environment.”**



## The Solution

Databarracks was selected by BEIS to Design and Build the UK ETS environment on Amazon Web Services.

“In some projects, if there are problems, we can push the delivery date back, but this was an immovable deadline of when the UK left the EU. We needed a highly responsive supplier to help us deliver in time. I was very impressed with the speed that Databarracks were first able to supply our Design documentation and to then start provisioning the environment.

“Relying on specialist suppliers for projects like this is absolutely critical. We are able to plug-in expertise quickly and accelerate our project. We get access to the specialists who do this kind of DevOps work day-in, day-out and can take advantage of their knowledge and industry best practice.

“There was a lot to do. In less than 12 months we needed to build the test, pre-prod and production environments and complete performance and application testing. User Acceptance Testing took place in the last 3 months, which meant the non-functional and security testing all needed to be completed before then. It was a tight schedule but at the start of 2021, we successfully launched the UK ETS.

“Interestingly, this project was not greatly hindered by the pandemic. Our application development team were already working remotely. Databarracks joined the project just as the UK was in lockdown but they were able to slot into our existing remote meetings very smoothly.”

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## The Benefits

“Working with Databarracks is a real comfort. There were lots of different aspects to delivering this project, but very quickly, after just a few meetings with the team, I knew the infrastructure was in safe hands and that they could deliver what we needed. It’s nice to have one less thing to worry about.

“We were able to take advantage of all the benefits of AWS for scalability and resiliency. Databarracks help us keep that environment cost-efficient, secure and resilient.”

As a result of working with Databarracks on this project Tahir reconfigured his own internal team.

“It became clear after working with the engineers that we needed to bolster our internal DevOps capability for our ongoing BaU operations. Our new hires started working with the Databarracks engineers, shadowing them and taking on management as they became comfortable.

“We’re now moving from the Build and Provisioning stage over to a more stable infrastructure that we will manage through our CI/CD process. In the future, we’ll be able to call on Databarracks’ specific DevOps skills as we need them.

“I work on the Climate Change team and because of the increased focus there are lots of initiatives happening. Those initiatives inevitably require technology to help deliver them so we expect to be kept very busy!”



## About Databarracks

Databarracks is the global leader in Public Cloud continuity.

We help organisations get the most out of the cloud and protect their data, wherever it lives.

And we back this up with unbeatable support. There’s no such thing as ‘above and beyond’ for our engineers because they only work to one standard: to keep your systems running perfectly.

Enterprise-class continuity, security and resilience. Accessible for all.

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