

# CASE STUDY: BAE SYSTEMS SWITCHING TO ELECTRIC VEHICLES PUTS PORTSMOUTH NAVAL BASE ON COURSE TO DELIVER ENERGY EFFICIENCY

A drive for energy efficiency at Portsmouth Naval Base meant significant changes to the existing fleet. However, through careful and clever analysis of fleet usage, Lex Autolease ensured the project not only delivered considerable cost and energy savings that could be passed on to the Ministry of Defence, but also kept disruption to a minimum.

## THE OBJECTIVE

BAE Systems delivers services for industrial, commercial and military sectors across the globe. In 2014, the company secured a contract with the Ministry of Defence (MOD) to manage Portsmouth Naval Base and support the Royal Navy's global operations for five years.

BAE Systems had been looking to support the MOD with a number of initiatives to improve their energy footprint, and the Naval Base's existing 107-strong diesel van fleet provided a key opportunity to deliver that ambition. The company was therefore keen to consider whether switching some vehicles to electric could provide cost and energy savings.

To achieve these savings, BAE Systems ran a commercial tender with a number of vehicle leasing providers.

"Out of our fleet of 107, we started off thinking about switching just five or six vehicles to electric," says Elliot Webber, Supply Chain Manager, BAE Systems. "As the tender progressed, and as numbers provided by Lex Autolease showed the potential emissions reduction and cost savings, it became apparent that we should be looking at electric vehicles a lot more broadly."

A rigorous analysis by Lex Autolease also helped BAE Systems allay some initial concerns about the suitability of electric vehicles. "During the tender process, we put forward a solution that we believed provided best value and also de-risked the introduction of electric vehicles," explains Chris Chandler, Principal Consultant, Lex Autolease. "By using telematics, we could provide BAE Systems with clear evidence of the efficiency of the vehicles and we could state with confidence that replacing the existing diesel vehicles with electric would work effectively."

Elliot says that the belief in electric vehicles from Lex Autolease was an important element in the success of their tender. "Moving to a different type of technology meant that we had lots of questions and required additional information at various points of the tender process. Lex Autolease were very quick at coming back to us and sharing their expertise."

Alongside the suitability of the vehicles themselves, one of the key considerations was the siting and installation of vehicle charging points at the famous Naval Base.

Penda Cox, Energy Solutions Project Manager, BAE Systems explains, "This is an old base with a lot of legacy systems and networks. That means that sometimes what we want to do isn't necessarily what we can do. Lex Autolease were invaluable in providing information and thinking around these issues."



#### **TYPE OF COMPANY:**

Global services supplier to industrial, commercial and military sectors.

### SERVICE OFFERING:

Replacements within the van fleet with a switch to electric vehicles.

#### SIZE OF FLEET:

107 vehicles at the Portsmouth Naval Base, 48 switched to electric.

## **THE SOLUTION**

Analysis and evidence of the new vehicle fleet by Lex Autolease meant BAE Systems contracted 48 new fully electric vans – 40% of its current fleet at the base. "In monetary terms, the new package will save the MOD £360,000 over the duration of the contract, which runs for two years with an option to extend into a third," says Frank Mcaleer, Head of Base Services, BAE Systems.

As well as supporting the move to an electric van fleet, Lex Autolease also provided 26 charging points and 28 designated parking bays for the vehicles at the naval base. Working closely with charge partner POD Point, the most suitable types of charger were selected for BAE Systems' needs. "Although it sounds quite simple, when you're on a naval base and there are technical and visual constraints, it requires a lot of thought and evidence collection to ensure the right charge points are installed in the best places," explains Chris.

"We used telematics on the existing fleet to understand the number of miles each vehicle did and to provide 'heat maps' to show us where the vehicles stopped for long periods," adds Chris. "That provided us with a starting point for where chargers for overnight and daytime charging were required."

Installation of the charge points – one central location, with others placed around the site for convenience – went well, according to Penda: "It was run immaculately. It gives me confidence that if we're going to install more charging points in the future, the relationship is solid and we can commit to that."

Richard Parker, Business Development Manager, Lex Autolease, manages the BAE Systems relationship. "We recognised early that this project provided a great opportunity for us to work with one of the UK's premier and most important businesses, and to support them with our experience of incorporating electric vehicles within a modern fleet.

"In just two weeks, my colleague Sarah Shum and I were able to create a support package that drew on all areas of our business – from the consultancy team to our commercial engineers – to create the ideal package for BAE Systems. This included Dave Pitt, one of our commercial engineers, being at the Naval Base every day for two weeks to review the site's vehicle needs and demonstrate with a test vehicle how electric vans could support BAE Systems' aims.

"Importantly, by working with BAE Systems early in the tender process to fully understand their needs, we have been able to deliver fully on our commitments and build a strong relationship," explains Richard.

That relationship between BAE Systems and Lex Autolease has been paramount to the success of the electric vehicle selection and charge point installation. "Lex Autolease gave us a lot of guidance," concludes Frank. "This was new territory for us and ultimately, as a government contract, it was subject to a lot of scrutiny. The support, flexibility and help from Lex Autolease is all you could want from a partnership."

## OUTCOMES

- Greater energy efficiency
- Cost savings to pass onto their own client
- Greater awareness of the potential of fully electric vehicles

## TESTIMONIALS

"We could state with confidence that replacing the existing diesel vehicles with electric would work." Chris Chandler, Principal Consultant Lex Autolease

"The support, flexibility and help from Lex Autolease is all you could want from a partnership." Frank Mcaleer, Head of Base Services BAE Systems

To find out more, contact our dedicated Fleet Consultancy team

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