LOGISTICS CASE STUDY

HEATHROW CLEAN VEHICLE PARTNERSHIP (CVP)

CLIENT REQUIREMENTS

Who we are?

As a leading construction logistics provider, Wilson James Ltd operates the Colnbrook Logistics Centre (CLC) at Heathrow airport.

What inspired us?

As part of Heathrow's sustainability strategy to significantly reduce vehicle emissions by 2020, Wilson James, collaborated with the Heathrow Clean Vehicle partnership and Heathrow Development Logistics to undertake a study to assess its current fleet and provide a strategic plan. This plan had to have a clear understanding of the technology development curve within Electric Vehicles (EVs), and model suitable technologies including infrastructure requirements for to ensure we 'future proofed' the investment and maintained our operational commitments to Heathrow.

What we achieved?

As a result, over the course of 2017 Wilson James electrified over 50% of its fleet, and went on to win the Heathrow CVP leadership and Champion award.

Wilson James was proud to win the inaugural Heathrow CVP Award in the Leadership category and to be named the 2017 CVP Champion.

WHAT WE DID

This case study provides an overview of how we developed a strategy to reduce emissions and electrify our fleet, and demonstrate the various operational and environmental enhancements that our business has benefited from through switching to electric vehicles.

Fleet assessment

As part of its delivery capability, Wilson James Ltd operates a fleet of Ford Transit Connects to escort the delivery vehicles airside once they have been security checked at the CLC. The nature of the vehicles role means they make short trips and spend a significant amount of time idling at the airport control posts and construction delivery sites. This not only is an inefficient use of fuel, but it also releases a high level of harmful CO2 and NOx emissions into the environment around the airport. With the age of the vehicles, operational costs were increasing and with one eye on the future and the business case presented by EVs, the benefits provided by electric vehicles was clear.

Modelling

On average, a Wilson James escort vehicle travels 9,480 miles each year, consuming 1572 litres of diesel and producing over 4,000 kg CO2e. By utilising the Heathrow CVP management tools, we have been able to assess our costs based on our current vehicle performance and be guided to electric vehicle providers and the required information on infrastructure and charging technologies. Through the Heathrow Development Logistics booking tool 'Fulcrum' we could also identify how we could implement the charging cycle of the vehicles within the operational schedule to have a zero impact to our operations.

This allowed us to build our business case and the fleet of Ford transits have now been replaced by 6 Nissan leafs and 2 Nissan e-NV200.

The Nissan leaf comparatively uses 2292KWh, generates just 348 kg C02e, and they produce zero tailpipe emissions, which is critical in solving the local air pollution problems.

The annual savings across the fleet accounts for around £9000 of operational costs, 19 tonnes of C02e and 1 tonne of NOx.

The operational savings has not yet been fully determined as these vehicles are compared against older vehicles, however with no engine wear parts and no faults to date to report suggest that the operational savings against additional vehicle cost will soon be evident.

De- risk the implementation

Through liaising with all suppliers to provide specialist training on how to operate and maintain the electric vehicles, we have been able to optimise their performance further. We have spent significant time engaging with our staff to ensure the vehicles are well handled and any battery life prolonging practices advised by the supplier are implemented. This was done by having the suppliers of the vehicles and charging installations on site, and this was directly filtered down to the operators. By collaborating with the CVP we have been able to reassure that we understand current and future impacts that will not damage our operational commitment.

FUTURE ASPIRATIONS

Wilson James has sought to ensure that it sits at the forefront of knowledge and understanding when it comes to clean technology so it can better adapt and meet future requirements. Other business centres at Wilson James have now adopted electric vehicles, and at the CLC further orders are in place to replace aging diesel vehicles still in the fleet with cleaner electric equivalents based on the success.

This commitment to not just complying with the minimum standards, has seen Wilson James not just achieve FORS Gold, be a FORS and CLOCS champion, but has also seen the company partner with Heathrow to share our experiences and provide guidance in sustainable fleet management.

In the wider community, Wilson James is proactive in supporting and promoting electric vehicles and exploring the suitability of Electric Freight vehicles to replace the remainder of its fleet to electric. We are members of FREVUE and LoCity (tfl), where we support and provide insight into our experiences so these organisations can better understand the requirements and challenges for electric vehicle users.

At the CLC, Wilson James also operates a fleet of HGVs, and has immediately ensured that they operate Euro 6 vehicles, but still committing to being at the forefront, we are constantly looking and keeping up to date, as to where we can change to electric freight vehicles; we most certainly will look to make it happen.

GOLD
FORS
FLEET OPERATOR RECOGNITION SCHEME

CLOCS
Looking out for vulnerable road users

Wilson James not only has achieved FORS Gold and a CLOCS championship but has become a true partner with Heathrow to provide guidance in sustainable fleet management.

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