

# ADEPT President's Awards 2023

Entry form

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**Award category** Delivering Clean Growth

**Project Title** Decarbonising fleet strategy

**Local authority entrant** Swindon Borough Council

## Headline summary (150 characters max.)

Costain worked with Swindon Borough Council to develop a strategy to transition its entire fleet to zero-emission vehicles by 2030.

### **Delivering clean growth: How is this project delivering clean growth, not just now but into the future – demonstrating ambition and vision, anticipating future challenges and future proofing growth including developing the workforce for the future? (150 words max)**

Our strategy for Swindon Borough Council drew upon our long history of delivering safe and successful schemes within local authorities. Our focus was on finding the most viable technical and economical route for the council to transition their entire fleet operations to zero emissions alternatives, without affecting service provision.

Key benefits:

- We established a clear roadmap that defined transitional milestones across the timeframe inclusive of phased infrastructure development and the economic pathway to deliver a zero emissions fleet.
- We shaped, created and produced the strategy within eight weeks as – given the challenging deadlines, scale and diversity of vehicles and operations – time was of the essence.
- Our findings project 100% zero tailpipe emitting fleet operations by 2030.
- In most scenarios, cost of ownership modelling demonstrated that over a 15-year period, the transition to battery electric technology was a cost-effective alternative to diesel.

### **Delivering clean growth: How is this project working across boundaries and with different partners to achieve long lasting clean growth? (150 words max)**

Swindon Borough Council operates a diverse fleet of almost 300 vehicles, from cars and light commercial vans through to HGVs, refuse collection vehicles, gritters and tractors. It was important to have a thorough understanding of their operational utilisation, maintenance and procurement lifecycles. As well as gathering telematics and usage data, we spent several days at their depot to fully understand the current fleet, its supporting infrastructure and how this could be built upon for the future. Qualitative research was undertaken with key stakeholders to clearly understand the needs of the council's fleet operators, maintainers and end-users. We used this information to define the Zero Emissions Vehicle technology options that best matched the council's operational requirements. Battery and hydrogen fuel cell electric vehicle technology were considered, as well as interim technologies including retrofitting vehicles and biofuels. Our research covered technology already available, alongside any

expected to emerge within the transitional timeframe.

**Delivering clean growth: How is this project proactively engaging with business to tackle problems and find solutions, stimulating the clean growth sector at the same time? (150 words max.)**

Using our total cost of ownership modelling tool, we evaluated the economic viability of the identified transition options across the timeframe. For example, the total cost of ownership analysis for refuse collection vehicles included five technology transition scenarios based on what can be achieved today in terms of new purchase, retrofit, alternative low carbon diesel fuel alternatives, and predicting a battery swapping option in the future. Analysis showed that based on the council's future requirements, transitioning to battery electric technology delivers the best operational outcome for achieving a decarbonised fleet.

Our evaluation also included a qualitative discussion of potential financial and business models within the automotive and related infrastructure sectors – examples include Mobility and Charging As A Service. We reviewed potential funding sources available through UK, national and regional bodies, as well as any innovation funding to support trials of new technology.

**Delivering clean growth: How is this project going beyond the 3-5 year budget cycle to prepare for future challenges including the use or consideration of innovative funding solutions? (150 words max.)**

A strategy has been produced and is supported by a clear roadmap drawing on insights from each stage of the project. This will enable Swindon Borough Council to transition safely and economically to a zero emissions fleet within the prescribed timeframe. Our recommendations cover growth/reduction scenarios for vehicles and infrastructure, financial considerations, roll out programmes, milestones and procurement strategies. Our reports and communications were made clear and accessible for a non-technical audience.

**All categories: please add anything else that supports your award entry**

“Whilst we understood our target of delivering fleet decarbonisation by 2030, getting the support, assistance and expertise of Costain was essential in providing us with a roadmap and a clear understanding of how to get there on time and in the most practical and efficient way we could.”

Brian Pinchbeck, Director of Operations, Swindon Borough Council

Please see the full case study here: <https://www.costain.com/solutions/case-studies/decarbonising-swindon-borough-councils-vehicle-fleet/> If you need any more information, please contact Francesca Buckley on francesca.buckley@costain.com