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Abstract Title: The cultural challenge when switching to commercial electric vehicles

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Abstract outlining:

Project Idea

Methodology and strategy to overcome the cultural challenges posed by the transition of diesel fleets to battery electric vehicles.

Purpose and Objectives

The transition to battery electric vehicles is more complex than just introducing new vehicle types to the fleet. Fleet managers have to adapt how they manage their fleets to take into account the different costs and performance of an electric fleet. Most importantly infrastructure is more critical than the vehicles themselves and to get this right involves working closely with other teams.

This paper presents the AECOM methodology that supports fleet operators overcome the cultural change challenge to successfully transition fleet vehicles and drivers to battery electric equivalents.

The paper concludes with a discussion on the key elements required to transition to a battery electric vehicle fleet and draws upon experiences within the sector, to provide a clear plan for how fleets can successfully move away from Internal Combustion Engines (ICE).

Findings and Originality

AECOM's Freight and Fleet team have helped its clients to develop a programmatic approach to transitioning to electric vehicles. The process allows the organisations to align the different stakeholders involved in the transition and draws out their requirements into an integrated process. For example, working with property teams on positioning of charging points, energy teams on charging infrastructure requirements and the finance team to establish the impact on total cost of ownership considering higher upfront costs for vehicle purchase but lower operating and maintenance costs.

Aligning all of these different stakeholder requirements into a staged process allows early decisions to be made about the critical upfront infrastructure development while allowing time to assess and implement the most suitable battery electric vehicles for the operation.

Conclusion and Policy Implications

Fleet operators are very experienced in operating and managing traditional ICE fleets. The switch to battery electric vehicles requires a new way of thinking about fleets and a greater need to work closer with other departments. Any successful plan to transition to battery electric vehicles must take into account the cultural change challenge as well as the operational requirements.

Keywords: Fleet Transition, Freight, Decarbonisation

Summary:

Successfully managing the transition from internal combustion engine to battery electric vehicles requires fleet operators to overcome the cultural change challenge as well as managing the operational changes. AECOM has a breadth of experience in supporting fleet transition ranging from fleet reviews, to charging infrastructure and transition strategies. This paper aims to provide an overview of the experience gained and how a programmatic approach can ensure that the cultural change requirements are carefully managed to deliver a successful change. The paper will discuss the learnings from individual projects and how they can be applied further.