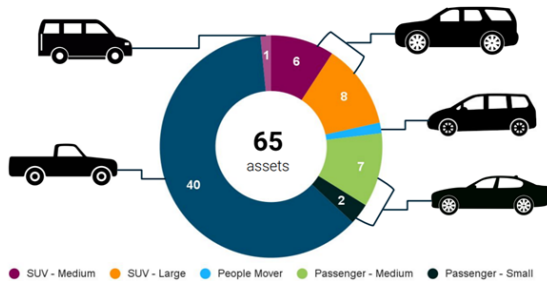


Electric Vehicle Transition

Sydney, NSW

Project Profile - Live Project

The SACL light vehicle fleet consists of predominantly LCVs (63%), SUVs, Passenger and People Mover vehicles.

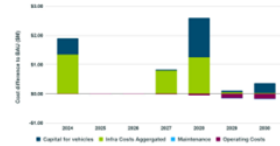


Status	Value	Duration	Contract Type
Detailed Design	Confidential	1 year	D&C

Scenario Analysis - Leadership transition

The leadership scenario requires \$5.29M* extra over the period to 2030 compared to the BAU scenario. More vehicles and charging infrastructure are deployed however the scenario does generate \$0.16M per annum in OPEX from 2030 onwards.

YEAR ON YEAR COST DIFFERENCE COMPARED TO BAU



BUSINESS AS USUAL



Overall financial summary 2024 to 2030*

Costs	BAU	Leadership transition	Difference
Light vehicles	\$7.19M	\$9.02M	(+) \$1.8M
Charging infrastructure		\$3.46M	
Total	\$7.19M	\$12.48M	(+) \$5.29M

LEADERSHIP TRANSITION



Key Info

Client	Sydney Airport (FM)
Sector	Aviation
Role	Technical PM / Design Manager

Background

We provided Project Management services to deliver Electrical Infrastructure upgrades and an Electric Vehicle transition pathway analysis.

Electrifying the vehicle fleet will eliminate 5% of Scope 1 emissions (370tCO₂e) when our client procures renewable electricity in 2025. Our client has a fleet of 65 vehicles of which 59 are Internal Combustion Engine (ICE) and 6 are Hybrid. Firstly, a detailed fleet analysis of vehicle use cases, infrastructure costs, vehicle transition costs, carbon impacts and the Net Zero 2030 target was undertaken. The analysis compared:

- BAU – Continuing with only purchasing Internal Combustion Engine (ICE) vehicles.
- Economic pathway – Only transition cars to electric when the life cycle costs of an equivalent EV are less than the existing ICE vehicle.
- Leadership pathway – Transition ICE cars to EV's at next replacement cycle.

Staging the project into 3 deployments of work throughout the precinct allowed us to move forward into construction phase and gain endorsement for CAPEX.

With a detailed focus on Fire Engineering throughout the project and 2 No. EV fires on premises during the concept phase we had to be meticulous in gaining authority approvals and working with internal insurance teams to manage the risk.

Working with our incumbent Fire Engineer we engaged and held multiple site walks with the following entities to ensure that each location was accepted by the Authorities. These were:

- Aircraft Rescue & Fire Fighting (ARFF)
- Airport Building Control (ABC)
- FR NSW

More Info: <https://www.caaengineering.com/blog>