

Commercial and financial considerations of transitioning to a Zero Emission Fleet

21 September 2021




Overview for this session



- ➔ Why I think that this is so important
- ➔ Highlight some key uncertainties that need to be resolved
- ➔ Put my thoughts forward for a plan on a page
- ➔ Consider some drivers for commercial and financial impacts
- ➔ Consider some of the financial implications for your business

My top reasons why this is so important for operators



-  **1** > Government are unsure of how they will approach the transition to ZEBs
-  **2** > Outside of a system implementation, this is a significant transformational project for your business
-  **3** > With all new emerging technologies, the operational and financial implications, including key risks are not fully understood

My top reasons why this is so important for operators



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The supplier eco-system is emerging but not yet mature



5

Current contractual models may expose the operator to financial risks during ZEB transition and ongoing provision of services



6

Knowledge of transition and operation of a ZEB fleet will be a competitive advantage over the short to medium term

Some key uncertainties and decisions



Technology Choice

Technology solutions are emerging and evolving rapidly... Is there an emerging preference?



Technology timing

What is the timing for the transition, and how long will the transition take?



Price Parity

At what point will the whole of life costs to support a ZEB Fleet be equal to or lower than a Diesel Fleet?



Contracting approach

What approach (Service Delivery Model) will Government take to procuring and contracting for these services?



Planning for the transition to ZEB Fleet



1. Research ZEBs technology
2. Early engagement with key suppliers
3. Understand emerging regulations and standards
4. Analyse how your operations will change with the introduction of ZEBs
5. Understanding key operational and financial risks
6. Analyse the financial implications, including key fixed and variable elements; sensitivities and risk; initial modelling.
7. Develop an initial business/operational plan with a view to implementation and business as usual
8. Identify key decisions to be made

1. Government backed / self-funded
2. Further validate/understand key operational implications; and to assist in future direction/decisions
3. Enable a deeper understanding of the approach to transitioning to a ZEB Fleet
4. Validation of key financial data, further understanding of key sensitivities and risks
5. Consideration of how to manage operational and financial risks
6. Develop a transition plan, including an operational model and financial model to support the move to BAU
7. Review contractual implications

1. Contractual adjustments: operational / financial
2. Transition project focused on, activities such as;
 - Changes to Depot infrastructure and fleet
 - Operational changes, scheduling and maintenance
 - People, process and system changes
 - Procurement and supply chain
3. Manage the financial implications of transition
4. Manage and mitigating risks during transition
5. Monitoring and reporting against business and financial plans
6. Transition to BAU including approach to business sustainability and continuity
7. Managing lifecycle investment, including asset management, refresh and residual values

Financial implications of a move to a ZEB Fleet



Operational implications

- Scheduling / Rostering
- Fleet requirements PVR / Spares
- Maintenance / Refurbs
- Labour – training / outsourcing
- Fuel / Energy
- Training / process Change
- Information ERP Systems Change



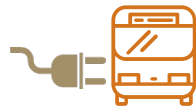
Contractual implications

- Approach to and timing for fleet transition
- Implication for EOL (diesel) fleet funding
- Upfront investment for transition
- Changes to funding models
- Allocation of risks, including financial risks
- Depot and fleet ownership
- Implications for performance regimes



Supply chain implications

- Vehicle Suppliers – Options (Size, Technology)
- Energy suppliers (Electricity / Hydrogen)
- Financiers / Insurance
- Technology Change
- Training providers



Financial implications

- Investment in time, cost of research/planning
- Funding for limited trial and proof of concepts
- Asset investment models – fleet and depot infrastructure
- Net financial operating costs impact
- Impact on cashflow, gross margin and profit margins
- Return on Asset, Return on Investment
- Scenario analysis



Financial implications of a move to a ZEB Fleet



Diesel

ZEB

Impact on Driver wages

How will scheduling and rostering of staff change as a result of ZEBs?

- Choice technology, battery/fuel cell, type of vehicle, vehicle distance, charging approach
- Impact resulting form Number of Vehicles to operate network (incl. PVR)

Distance Variable:
Fuel / Energy

- Consumption rates (known)
- Fuel price, AdBlue
- Fuel Rebates

- Battery efficiency / Fuel cell
- Price of electricity / hydrogen, EV taxes
- Approach to charging

Distance Variable:
Maintenance / Repairs /
Refurbs.

The cost is reasonably well known
Funding - Average Cpk rate over the contract

The cost NOT well known;
Funding approach not yet known.
Not enough history to inform Avg. Cpk rate!

Distance Variable:
Labour / Outsourced
Maint.

The cost is reasonably well known with
significant history
Funding - Average Cpk rate over the contract

Reliant on trials and supplier information.
Funding approach not yet known
Staff training / upskilling or outsourcing

Financial implications of a move to a ZEB Fleet



Diesel

ZEB

Direct Fixed Costs
Registration / Insurance

Known fixed cost to support diesel fleet
Mature insurance market

Emerging fixed costs to support ZEBs
Emerging insurance market

Capex. Cost and
Depreciation of
Infrastructure

Existing fuel tanks and depot infrastructure
to support

Multiple solutions for ZEBs, i.e. fast
charge/slow charge; hydrogen fuel tanks

Capex. Cost and
Depreciation of Fleet

Current finance arrangements, and
depreciation (potential issue of
impairment); currently lower cost

Emerging finance solutions, different
depreciation life, currently higher costs,
including batteries

IT system changes: Fleet
management, Energy
management etc.

Current IT systems support diesel fleet
management, refuelling, repairs and
maintenance and inventory

Emerging requirements to adapt IT systems
to support ZEB fleet / new IT solutions

Financial implications of a move to a ZEB Fleet



Trial / Proof of Concept

Key decision to be made around the right technology to suit the nature of your services and the long term sustainability and efficiency of operations.

Scope and price the transition project; understand ongoing opex. and capex. requirements.

Transition
(Excl. Capex)

- Changes to depot
- New IT Systems
- Retraining staff
- Process and policy change
- Project management
- Regulatory compliance



End of life costs
Diesel fleet

- Residual Value of Diesel Fleet, residual Government funding
- Retirement cost of Diesel infrastructure
- Depot infrastructure and remediation costs

Important to
know

1. The Net Financial Impact on your business of the transition to ZEB fleet
2. Understand the investment required, including transition cost
3. Consider financial risks and allow for contingency in estimates
4. Model the profit/loss, balance sheet and cash flow impacts

Q&A

Contact us



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