

Report of the Interim Strategic Director

INVESTING IN A GREENER FLEET1. Purpose of report

To update the Committee on the Council's vehicle and plant fleet and review opportunities to introduce greener options when renewing or replacing vehicles and plant.

2. Background

The current road registered transport fleet consists of:

- 18 refuse vehicles
- 63 light commercial vehicles, vans and tippers
- 1 JCB and 6 tractors/ride on mowers
- 2 electric vans (ULEV Ultra Low Electric Vehicles)
- 200 items of plant

The fleet is reviewed annually in line with departmental requirements, age profile and engineering condition of the vehicles. The fleet is primarily powered by diesel traction.

All new vehicles procured since 2014 have been supplied with Euro 6 specification engines which set higher standards for low levels of exhaust emissions.

The vehicle fleet is procured through contracts within the Nottingham Vehicle Consortium, an organisation consisting of Nottinghamshire Councils that achieve Value for Money through joint purchasing. Where specialist vehicles or plant are required, approved frameworks for purchasing are utilised. Further fleet and plant details are provided in the appendix.

3. Financial implications

The 2019/20 Capital Programme includes £765,000 for replacement or refurbishment of vehicles. Orders for the majority of the vehicles have been placed with 12 vehicles delivered and operational.

Recommendation

The Committee is asked to NOTE the current arrangements relating to the vehicle fleet and the options that are being considered relating to investing in a greener fleet for the future.

Background papers

Nil

APPENDIX

Refuse Vehicles

Historically refuse vehicles were replaced after 7 years as part of the capital vehicle replacement programme. In 2016 an alternative approach was adopted based on extending vehicle life past 7 years by introducing a vehicle refurbishment programme. This has extended the life of refuse vehicles to 10 years with an annual cost saving of £7k per refuse vehicle and £600 per van. In total the cost avoidance has achieved a saving of £166k per annum. Whilst incurring some small additional running costs the programme has been successful and it is proposed that the 2020/21 Capital Programme includes an extension of this policy.

Further cost savings have been achieved by introducing 8 wheel refuse vehicles where collection routes allow. This type of vehicle results in increased capacity and leads to a reduction in the number of trips to the tip, thereby reducing vehicle mileage and emissions. The gradual introduction of the larger vehicles provides an opportunity to reduce the refuse vehicle fleet by two vehicles giving an estimated saving of £80k per annum from 2022.

Light Commercial Vehicles

As with refuse vehicles the replacement programme for these vehicles has been extended enabling them to operate up to 10 years plus assisted by a mid-life refurbishment programme.

Within the current fleet there are 2 small electric vans (ULEV) which are proving to be very successful and cost effective. Two more small electric vans are due to be purchased between 2020 and 2022 replacing existing diesel vans.

The Way Forward

In addition to continuing with a programme of vehicle life extension and replacing small vans with electric vehicles it is appropriate to review the larger vehicles in the fleet to consider how the fleet can become more environmentally friendly for the future. The scope for replacing the larger vehicles i.e. the refuse vehicles, road sweepers, larger vans and tractors with hybrid (diesel electric) or all electric vehicles is limited at the present time due to:

- Lack of choice and availability on the market
- Capital cost of electric or hybrid vehicles
- Investment required within the infrastructure at Kimberley Depot to charge the increased number of vehicles

The table below shows the advantages and disadvantages of moving towards a decarbonised transport fleet:

Advantages	Disadvantages
Council takes a lead in investing in new technology and sets an example for residents	Concern with range issues
Low noise emissions	Charging time, locations and battery life
Low exhaust emissions	Payload issues
Good performance with low running costs	Purchase cost
Potential source of income - feedback to national grid	Maintenance requirements and retraining of staff required

However, with incentives from central government (£6k subsidy) and initiatives in local government to consider ways to tackle climate change and reduce carbon emissions, it is expected that availability of vehicles will significantly increase over the next ten years. It is also likely that the capital cost for such vehicles will reduce thus bringing the whole life cost of the vehicle more in line with current diesel vehicles.

The table below shows the cost comparison for electric against diesel vehicles; the figures include purchase, maintenance, road fund and fuel costs:

Vehicle	Purchase price	Whole life cost over a 10 year period
Diesel refuse vehicle	£168k	£500k
Electric refuse vehicle	£336k	£548k
Diesel van	£18k	£29.5k
Electric van	£18.5k includes £6k grant	£21k

To support the move to a greener fleet a Transport and Fleet Strategy is being prepared and this will be submitted for committee approval early next year.

Small Plant and Cultural Issues

For smaller items of plant and powered hand tools, industry has already made great strides towards a decarbonised economy with investment in lithium ion battery technology for such items as leaf blowers, trimmers and powered hand tools and this technological innovation is now mainstream and will continue.

The changes required around transport are not just based on adopting and investing in new technology; there is also a requirement to provide drivers and users with clear guidelines around the implications of responsible driving and the impact of excessive speed and its effect on fuel consumption. For front line staff this issue has been supported by regular tool box talks on vehicle use and daily maintenance requirements.