

# Fleet Decarbonisation / Future Centre of Operations

**Dave Watkins & Matthew Stent**  
Neighbourhood Services



*a better place to live and work*

# Background

In September 2020, BGCBC declared a climate emergency and published their Decarbonisation Plan to 2030. The Decarbonisation Plan supports the Welsh Government's ambition for the Welsh public sector to be climate neutral by 2030 and for all new public sector vehicles to be an ultra-low emission vehicle by 2025 or 2030 for heavy goods vehicles.

# Fleet Review

Also in 2020, BGCBC commissioned Cenex to undertake a detailed review of the suitability of low and ultra-low emission vehicle technologies, as well as the infrastructure and depot power supply requirements to transition the fleet to ultra-low emission vehicles by 2030.

# Fleet Review

## Methodology...

1. Summary of Current Fleet
2. ULEV Technology Options
3. ULEV Performance Reviews & Technology Selection
4. Low Emission Vehicle Infrastructure Review
5. Recommended Replacement Vehicle Technologies
6. Implementation Recommendations and Next Steps

# Fleet Review

## Conclusions...

- Implement battery electric small vans, medium vans, selected large vans and associated electric vehicle charge points according to the current vehicle replacement schedule...

*Table 6 – Calculated Vehicle Replacement Schedule (financial year)*

	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
Medium MPV	0	1	0	0	1	0	0	0	0	0
Large 4x4 / SUV	4	1	1	0	0	0	0	1	0	0
Small Van	8	0	2	0	0	0	0	1	0	0
Medium Van	0	3	1	0	0	0	0	0	0	0
Large Van	0	3	1	1	3	0	0	8	0	4
Large Van (> 3.5t GVW)	0	3	4	2	1	1	2	0	3	0
Rigid Truck (≤ 7.5t GVW)	1	0	0	0	0	0	2	1	3	0
Rigid Truck (12-18t GVW)	1	5	3	0	11	4	3	2	1	0
<b>Total</b>	<b>14</b>	<b>16</b>	<b>12</b>	<b>3</b>	<b>16</b>	<b>5</b>	<b>7</b>	<b>13</b>	<b>7</b>	<b>4</b>

*a better place to live and work*

# Fleet Review

## Conclusions [continued]...

- Prepare for the potential introduction of ultra-low emission rigid trucks from 2025 onwards
- Investigate the feasibility of using increased blends of biodiesel or renewable diesel as an interim solution to provide immediate greenhouse gas emissions reductions.
- Consider operational improvements that could increase the uptake of ultra-low emission vehicles.



# First steps!



*a better place to live and work*

# EV ready?

- Current Workshop adaptations
- Fitter training – Coleg Gwent
- Driver awareness - trials
- Grant funding – WGES
- Infrastructure – Future Facility

## THINKING OF THE LONGER TERM

*a better place to live and work*



# Infrastructure

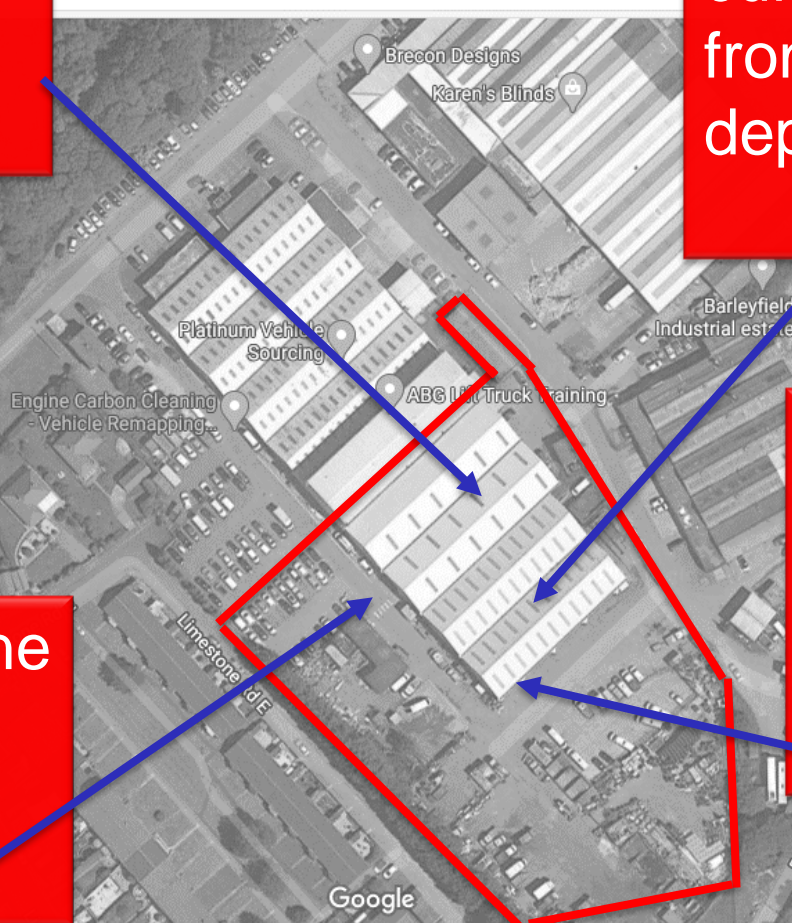
Current site is  
15,500m<sup>2</sup>.

All frontline services  
currently operate  
from the Central  
depot.

Approx. 200 frontline  
staff; and 40 office  
based staff

Estimated costs  
to bring site up to  
standard is £3  
million.

53.934, -3.1722656, 242m/data=!3m1!1e3?hl=en-US



*a better place to live and work*



# Project Main Drivers

The main drivers for developing a new Centre of Operations, are as follows;

1. The existing depot is outdated (over 50 years old) and subject to issues with regard to layout, efficiency and backlog maintenance (estimated in 2018 to be in the region of £3m alone).
2. The current green agenda and Welsh Government's objective for the public sector in Wales to become carbon neutral by 2030.
3. The need to create the necessary infrastructure to move to a fully electrified fleet within the next 5-10 years.
4. The need to establish an accessible, safe and modern workplace to deliver key frontline services.



*a better place to live and work*



# New Centre Of Operations proposed service uses

The primary use of the New Centre of Operations will be to provide state-of-the-art facilities for the delivery of front line services, such as;

- Cleansing Services
- Waste & Recycling Services
- Grounds Maintenance Services
- Bereavement & Cemetery Services
- Highways Maintenance
- Winter maintenance
- Fleet Storage and Maintenance
- Street Lighting & Technical Services DLO
- Stores for vehicle parts and service consumables
- Staff Welfare Facilities
- Staff and Fleet Parking

*a better place to live and work*



# Proposed New Centre Of Operations

## Fleet Numbers;

- The Council has 119 fleet vehicles including various size vans, lorries, mini busses, tractors and other plant.
- The electrification of the waste and recycling fleet alone will reduce the carbon footprint by 415 tons of Co<sup>2</sup> per year.
- The new site and buildings design will include infrastructure to support the electrification of Blaenau Gwent's entire fleet of vehicles.

## Building Design;

- In response to Welsh Governments call for action on decarbonisation the new site and buildings will be carbon neutral and see Blaenau Gwent CBC lead in areas like decarbonisation through a greener vehicle fleet, rain water capture and the harnessing of wind and solar power, while delivering a more sustainable economic solution for future needs.
- The Council is also investing, along with partners, in off site renewable energy through the installation of a wind turbine at Silent Valley, just 2 miles from the proposed site for the new Centre of Operations, providing an opportunity to supply renewable cheap energy.

# Cont.;

- The new site is 32,000m<sup>2</sup>
- The foot print for the new building is 5,200m<sup>2</sup>
- The site will have provision for electrical hook up for each and every fleet vehicle.
- Staff parking facilities will be made available which will include an electrical charging zone with 50 parking spaces identified for staff vehicle charging.
- Cycle compound and recharging facilities.
- The whole project is currently estimated at £20m (including site risk i.e. mining/flooding)
- Outline business plan submitted to Welsh Government for comment.

# Timeline

1. Site ground investigation works to be undertaken during February 2022
2. Outline Business Case Approved March 2022
3. Full planning application submitted by May 2022
4. Draft specification/tender documents and evaluate tenders through September 2022 to December 2022
5. Let contract January 2023
6. Design and build works through February 2023
7. Commence on site March/April 2023
8. Anticipated project projected completion spring 2024