

Recommendation Tracking – Progress Report (December 2009) – Scrutiny Board (Environments and Neighbourhoods)

Categories

- 1 - Stop monitoring
- 2 - Achieved
- 3 - Not achieved (Obstacle)
- 4 - Not achieved (Progress made acceptable. Continue monitoring)
- 5 - Not achieved (Progress made not acceptable. Continue monitoring)
- 6 - Not for review this session

CO2 Emissions Inquiry (2008)

Recommendation for monitoring	Evidence of progress and contextual information	Status (categories 1 – 6) (to be completed by Scrutiny)	Complete
<p>4. That the potential for further reductions in CO2 emissions through changes to the current usage patterns of street lighting be reviewed in more detail, and includes consideration of the implications associated with altering the times that street lights are on and potentially through selective dimming late at night.</p>	<p>Previous response provided in March 2009:</p> <p>Columns - In the first 5 years of our project, the 80,000 old concrete columns will be replaced by approx 14% fewer steel units.</p> <p>Lanterns - Using mainly the 'Philips Cosmopolis' unit on our PFI project has enabled us to get more light for the energy we consume. This is because the old Low/High Pressure Sodium lights actually consume more than their rating; e.g. we can now get the same amount of light for 64W of energy whereas the old unit consumed 84W.</p> <p>Trimming - As the old street lights are replaced throughout the city, the new units will be installed with a 55/28 lux cell to control the</p>		

switching. This will replace the 70/35 lux on all the existing columns. This saves approx 8-9 mins burning time per unit, per day. With more than 100,000 units (lighting columns and signs) across the city, this can amount to a substantial reduction (292m minutes of lighting time, at an average of 50W per lamp, is equivalent to 243MWh or 127 tonnes CO₂).

Dimming - Standards required for lighting roads are based on a number of factors one of which is traffic flow. We are working with our PFI partners at Southern Electric Contracting to ensure that major highways which only carry small volumes of traffic outside peak hours at night are identified and the benefits of dimming considered. Whilst the technology is available, so-called experts are still not 100% convinced of its reliability. We will be undertaking a trial in conjunction with our partners at SEC very shortly.

LED's - The technology is still not available at suitable quality and cost for highway lighting. However, LED tunnel lighting is more advanced and when the lighting is replaced in the Leeds/ Bradford Airport tunnel, a 'part LED' solution will be implemented. The entry and exit portals will need to be lit with conventional fittings to achieve the required levels, but the internal running lights will be done with LED's. This will reduce energy consumption inside the tunnel by approx 70-80%.

Current position:

Under the terms of the Street Lighting PFI agreement, Southern Electric Contracting (SEC) are required to meet milestones associated with the lighting replacement programme. SEC have successfully achieved milestones 1 to 6 and are on target to meet milestone 7 of 10 within the agreed timescale. Currently this has resulted in a reduction in the total number of street lights by 8%.

A trial of LED street lights has been installed and the local residents

	<p>are being consulted to establish their view of the performance and appearance of this type of lighting. Similarly a dimming trial has been installed, again resident's opinion is to be obtained.</p> <p>Work is scheduled to commence on the relighting of the LBIA tunnel in January 2010. The new lighting solution will include LED lighting.</p>		
<p>5. That a policy be developed and implemented to ensure the use of Whole Life Costing analysis when specifying new-build and major refurbishment projects, including the development of a linked, ring-fenced, fund to pay additional capital costs where revenue costs would be recouped within an agreed time period.</p>	<p>Previous response provided in March 2009:</p> <p>Initial discussions have been held with Alan Gay regarding funding additional capital costs for BREEAM excellent. The preferred option is to use prudential borrowing powers to access finance where there is a solid WLC business case. A funding policy will be confirmed as part of policy development.</p> <p>Current position:</p> <p>Sustainable Buildings Procurement Strategy to be recommended to Executive Board meeting of 12 February 2010.</p> <p>The NI185 Action Plan contains specific actions to improve the sustainability of new buildings and major refurbishment, including developing funding arrangements for additional capital requirements (actions 4.9.1-4.12). This is regularly monitored and reported through the Council Business Plan Action Tracker VP5a with actions 4.9.1-4.12 currently on target. We therefore recommend stopping monitoring this action through Environment Scrutiny.</p>		
<p>6. That the Board, or its successor body be kept up-to-date regarding:</p> <p>(i) The ongoing investigations around the use of alternative</p>	<p>Previous response provided in March 2009:</p> <p>(i) Retrofitting of Connaught diesel electric hybrid kit has not taken place due to Cenex withdrawing funding for the programme.</p>		

<p>fuelled vehicles in the Council's fleet.</p> <p>(ii) The outcome of the current review of CO2 emissions from vehicle deployment and the arising targeted reduction programme</p>	<p>Work is continuing towards the CNG and Dual-fuel RCV demonstration project with a target commencement date of May 09. A CNG van has also been added in to the demonstration project using external grant funding from the Ashden Charity award scheme. The three vehicles will be fuelled with carbon neutral biomethane for the duration of the trial. An initial offer of additional funding towards this project has been received from Cenex subject to terms and conditions being agreed on the monitoring and reporting of the trial vehicles. We are also working with a partnership looking for support to develop a diesel-electric hybrid refuse collection vehicle, which we could trial within Leeds.</p> <p>Leeds City Council was accepted on to the Low Carbon Vehicle Procurement Programme (LCVPP) with the best application from 72 hopefuls. The programme is designed to introduce fleet scale demonstration trials of lower carbon and all electric panel vans. Leeds will have around 40 such vehicles due for renewal during the next financial year.</p> <p>(ii) The green fleet review highlighted that 158 HGVs (15% of the total Council fleet) was responsible for consuming 45% of the total fuel consumption (3.8m litres). Of these 158 HGVs, 65 are RCVs averaging around 3.5mpg and accounting for over 40% of the entire fleet carbon footprint.</p> <p>These vehicles therefore offer the greatest prospect for making the most significant reductions to Council fleet CO₂ emissions, at lowest cost per tonne of carbon saved. It is actually possible that initial increase in investment would return a net cost saving over a 5 year period. A trial has been set up to investigate this possibility (see 6(i) above).</p> <p>Further work will be taken to try and drill down emissions to particular vehicle and service provision areas in an attempt to identify possible</p>		
---	---	--	--

alternative technology solutions most appropriate for the individual vehicles role. Participation in the LCVPP should assist in this work.

Current position:

i) The RCV demonstration project met with initial vehicle delivery problems, However the one vehicle began operational duty on 16th June 2009. The Dual-fuel RCV was not ready to begin operations until late August effectively delaying the beginning of it's trial until industrial action has ceased. There have been some difficulties experienced related to the refueling infrastructure which are being addressed, however the vehicle appeared to performed well up to the onset of industrial action.

£10k funding towards CNG van sized vehicle is still available to LCC. However the service area intending to purchase the vehicle has encountered budgetary constraints and has so far not placed an order. It may be that the funding is now put towards the provision of an a CNG vehicle within Streetscene based at the same depot as the RCVs.

The terms and conditions for accepting £10k funding from Cenex towards monitoring and reporting of the project have been agreed. It has been agreed to provide a preliminary report analysing the data collected so far from the CNG vehicle and discussing the practical issues of encountered in setting up the trial and data collection methodology.

Leeds has ordered 20 vans (16 diesel-electric hybrid and 4 all electric) under the Low Carbon Vehicle Procurement Programme (LCVPP) which should start arriving on the fleet just before the end of the 09/10 financial year.

ii) Work has started on vehicle service and refueling records to help identify which services and operations are the most polluting. Fleet

Services and Transport Policy are currently assessing the cost /benefit of signing up to the EST Motorvate Programme, which primarily focuses on the detailed recording of the mileage and fuel usage of vehicles under 3.5T.

Data collected over the first three months operation of the biomethane powered CNG Mercedes RCV indicates CO2 emission savings of between 55 and 65% can be expected over the standard vehicle operating on a 5% biodiesel blend.

A trial is also currently underway testing an HGV fitted with an onboard hydrogen generator. It is claimed to improve combustion and reduce fuel consumption.

Details of recent interventions initiated by Fleet Services and Transport Policy were submitted to the EST's Fleethero award scheme. Leeds' entry made the final shortlist.

Detailed actions to reduce CO₂ emissions from fleet vehicles, through both improving efficiency and switching fuels are included within the NI185 Action Plan. This is regularly monitored and reported through the Council Business Plan Action Tracker VP5a with all relevant actions in that plan currently on target. We therefore recommend stopping monitoring this action through Environment Scrutiny.