

# CHESHIRE EAST COUNCIL

Community Safety Scrutiny Committee

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**Date of Meeting:** 24<sup>th</sup> October 2013  
**Report of:** Cheshire East Highways  
**Subject/Title:** Carbon Reduction Programme – Street Lighting

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## **1.0 Report Summary**

1.1 This report looks to respond to 3 key questions raised.

1.1.1 Have there been any safety issues as a result of the switch off?

1.1.2 Has the decision reduced the Council's carbon footprint?

1.1.3 Has the decision reduced costs?

## **2.0 Recommendation**

2.1 That no changes are made to the street lighting from those identified and currently implemented.

2.2 That the report that will be prepared to report on the changes made to street lighting across the Borough is reported to the Committee when finalised.

2.3 That the next phase of works to introduce 'Part Night' operation into residential areas is considered in the context of works to capture further savings as a part of the carbon reduction programme.

## **3.0 Reasons for Recommendations**

3.1 In response to the specific questions identified.

3.2 The safety of road users and crime and security had been a key aspect of the initial project.

3.2.1 Contact has been continued with Cheshire Police and where incidents have required the police have been contacted for background information.

3.2.2 No road safety issues have been reported to date that are attributed to the areas where switch off or dimming has been implemented.

3.2.3 One location has been identified where crime and security has been a concern and this section of road will be relit.

- 3.3 The works to date have reduced the amount of carbon that can be attributed to street lighting.
  - 3.3.1 The estimated annual carbon savings for the savings made to date are 322 tonnes.
  - 3.3.2 These savings are based on the changes made with the initial switch off of 700 (after some have been switched back on due to exceptions being identified) street lights. Additional savings are also identified with the introduction of dimming across the remaining main traffic routes with 1000 currently dimmed and a further estimated 4000 to also be made.
  - 3.3.3 All changes also include for the 'trimming' of the operation of the street lighting with a later switch-on and earlier switch-off controlled by the ambient light levels. This could realise approximately one hour of savings every day.
  - 3.3.4 The full realisation of the calculated carbon savings are based on ongoing discussions with energy suppliers and changes being made to the asset database.
- 3.4 The changes made impact on costs in a number of ways
  - 3.4.1 The estimated annual savings relating to energy for changes made to date are 600,000 Kw /hrs (£60,000 at 10p per unit).
  - 3.4.2 The full realisation of the calculated savings is based on ongoing discussions with energy suppliers and changes being made to the asset database.
  - 3.4.3 Those columns that have been 'switched off' no longer need maintenance. This has saved costs relating to materials, labour and traffic management. This does not include the costs associated with disruption on the network when completing repairs.
  - 3.4.4 On confirmation of the changes made it is proposed that the redundant equipment will be removed, reducing the overall street lighting asset value. Due to the ageing condition of the street lighting this will reduce the replacement value of the asset.
- 3.5 In addition to the specific questions raised Cheshire East Highways brings to the attention of the committee the next phase of work to introduce Part Night lighting into residential areas across the Borough.
  - 3.5.1 Part Night operation was proposed in residential areas and endorsed to support the Carbon Reduction Programme.
  - 3.5.2 The approach to part night operation has been modified to not implement in residential on 'an every other column' approach. This will avoid whole areas being switched off over night and is based on the success of this approach in early trials.
  - 3.5.3 The operation of this will switch the lights off at 00:00 (midnight) and on at 05:30.
  - 3.5.4 The introduction of this will be subject to briefing of the appropriate Borough and Parish Councillors. This will include consultation with the police and fire service in identifying any higher risk areas. Others areas, including sheltered housing where

communities may feel isolated or insecure by from this approach will also be considered exceptions to Part Night operation.

3.5.5 It is estimated that the second phase of works will change the operation of a further 6,700 street lights (3,300 Part Night and 3,400 Trimmed).

3.5.6 The calculated annual savings relating to carbon and energy for these changes are estimated at over 500,000 Kw/ hrs approximately 260 tonnes and £50,000 per year respectively.

#### **4.0 Wards Affected**

4.1 All wards (one ward is unaffected due to having no street lighting)

#### **5.0 Local Ward Members**

5.1 All members

#### **6.0 Policy Implications**

6.1 The street lighting carbon reduction programme was endorsed through the Environment and Prosperity Scrutiny Committee in July 2012.

#### **7.0 Financial Implications**

7.1 The savings identified are ongoing and subject to agreement with the energy companies of the changes made.

#### **8.0 Legal Implications**

8.1 None.

#### **9.0 Risk Management**

9.1 The impact on Road Safety, Crime and Anti Social Behaviour has been considered in the development of the street lighting carbon reduction programme.

#### **10.0 Background and Options**

10.1 Documentation relating to the progress to date and works are available at <http://www.cheshireeasthighways.org/Street-Lighting/Reducing-Carbon-Saving-Money.aspx>

## **11.0 Access to Information**

The background papers relating to this report can be inspected by contacting the report writer:

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