

# SHEDDING LIGHT

A survey of local authority approaches to lighting in England Key findings and recommendations

# **SUMMARY**

The Campaign to Protect Rural England (CPRE) is a leading voice in the campaign against light pollution. We have a special interest in this issue: darkness at night is one of the key characteristics of rural areas and it represents a major difference between what is rural and what is urban.

ut light doesn't respect boundaries; it can spread for miles from the source and blurs the distinction between town and country. Light spilling up into the night sky is also a waste of energy and money – local authorities were estimated to spend £616 million on street lighting in 2013-14¹ – and lighting can account for between 15-30% of a local authority's carbon emissions.

In 2012, CPRE welcomed the first ever planning policy on light pollution in the National Planning Policy Framework (NPPF). To help us understand how local authorities are responding to this change, and to provide councils and residents with advice on how to tackle light pollution, we carried out a survey (between January and February 2014). We published the findings as Shedding Light — a survey of local authority approaches to lighting in England in April 2014. The survey results have given us a better understanding of how decisions are made about lighting at the local level, including how lighting is dealt with in local planning and how local authorities are working to make street lighting more energy and cost efficient.

# Light pollution of Eastbourne, from Warren Hill 1 Department for Communities and Local Government 'Local authority revenue expenditure and financing England: 2013 to 2014 budget'

# THE KEY FINDINGS

The NPPF policy to control light pollution does not yet appear to have made a real impact in local policies. Only six of the 49 local authorities who have a lighting policy said it was introduced due to the NPPF;

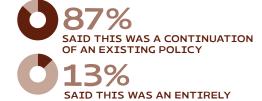
Local authorities can potentially save hundreds of thousands of pounds each year by either switching off or dimming street lights in suitable locations. These schemes can also reduce carbon emissions and save energy;



Local authorities told us that communities are far more supportive of dimming schemes than switching off street lights between midnight and 5am.







NEW POLICY DUE TO THE NPPF

# SHEDDING LIGHT

**HEADLINE SURVEY FINDINGS** 

# STREET LIGHT SWITCH-OFF SCHEMES

ur survey asked local authorities if they are engaged in a street light switch-off scheme – also referred to as part-night lighting.

Out of 71 local authorities who responded to this question 23 said they were switching off street lighting in their areas. Of these, 16 were permanent schemes and seven were trials. 39% of the switch-off schemes had been running for a year or two, and a further 26% had been running for less than a year.

Our survey asked councils how local communities had reacted to the switch-off scheme; 18 out of the 21 local authorities who answered said the community response had been mixed. This compares with two local authorities who said their community had been very supportive and one who said the community was not supportive.

THE TOP REASONS FOR SWITCHING OFF:

95% ENERGY SAVING 91% COST SAVING 43% REDUCING LIGHT POLLUTION

**132**%

OF LOCAL AUTHORITIES SAID THEY WERE SWITCHING OFF STREET LIGHTING, EITHER PERMANENTLY OR AS A TRIAL

086%

SAID THE RESPONSE FROM THE LOCAL COMMUNITY HAD BEEN MIXED ABOUT PART-NIGHT LIGHTING

CPRE believes that community engagement is vital when local authorities are considering part-night lighting and switching off street lighting – 91% of respondents consulted their local community about proposals to switch off street lighting for part or all of the night. The impact of lower light levels is a common, and understandable, concern for residents when they hear that their council is considering either part-night lighting or dimming schemes. Our research did not reveal a clear link between crime and lighting levels and no council respondents said there had been an increase in crime in areas where street lights had been switched off. The councils are in close contact with police forces in their areas to monitor any incidents and said they would re-light any area at the request of the police.

# Money saved by adjustments to street lighting

Cost saving was a motivation for nine out of ten (91%) local authorities who were running a street light switch-off scheme and eight out of ten (78%) of those running a dimming scheme.

Examples from the survey:

- Sefton Council expects to save £15,000 during 2013/14 by trialling switching off alternate street lights.
- Essex County Council previously spent approximately £4.6m on electricity for street lighting each year but expect that switching to partnight lighting will save approximately £1m per uear.
- Bradford Council's street light dimming scheme is designed to save £400,000 a year.
- North Somerset Council estimates £300,000 a year will be saved following the completion of their dimming and part-night lighting scheme.

# LOCAL PLANNING AND LIGHTING

he survey asked local authorities to tell us about how they dealt with lighting in connection with their planning responsibilities, including policy making and when making decisions on planning applications.

Out of the 76 local authorities who responded to the question on whether they had a lighting policy in either their Local Plan or related document, 49 of them (65%) said they did have a policy on lighting. This includes 12 County Councils, 16 District Councils, four London Boroughs, seven Metropolitan Boroughs and ten Unitary Authorities.

Our survey also asked local authorities what type of developments they considered the lighting impact of. Out of 80 local council respondents, 78 considered the lighting impact of any new development; 66 considered a change to lighting of existing development and 59 considered the lighting impact of a highway proposal. CPRE believes that local authorities should always consider

the lighting scheme of any new development and require notification of a change to the lighting scheme of an existing development. The lighting impact of highway proposals should also be given careful consideration, particularly at junctions and roundabouts which may be closer to residential areas and visible over a wider area.

We asked local authorities how important a variety of factors were when assessing development/highway lighting proposals.

THE TOP FACTORS FOR LOCAL AUTHORITIES WHEN ASSESSING LIGHTING PROPOSALS:



**PROPERTIES** 



NIGHT SKY



# STREET LIGHT DIMMING SCHEMES

n increasing number of local authorities are investing in new lighting technology which can be dimmed – allowing local discretion for lighting levels.

We asked local authorities whether they were engaged in a dimming scheme; almost half (32) of the 67 respondents to this question said they were. Of the councils who are running a dimming scheme 26 said it was permanent compared with five who are currently running dimming trials.

Many of the local authorities who took part in the survey said how they hoped to reduce their carbon emissions by adjusting their approach to street lighting. Recent figures show that a third of the UK's carbon dioxide emissions come from fossil-fuelled electricity generation. Almost all (95%) of local authorities who were running part-night lighting schemes and more (97%) who were running dimming schemes said that energy saving was the leading motivation.

# THE TOP REASONS FOR DIMMING LIGHTS:

97% ENERGY SAVING

78% COST SAVING
53% REDUCING LIGHT POLLUTION

# Reducing carbon emissions by adjusting street lighting

Examples from the survey:

- Shropshire County Council hopes to save up to 600 tonnes of CO<sub>2</sub> per year, which is around 15% of current street lighting emissions, as a result of their part-night lighting trial.
- Essex County Council expects to reduce carbon emissions by over 8,000 tonnes per year due to their part-night lighting scheme.
- Derbyshire County Council has a commitment to reduce carbon emissions by 25% by 2015 which it hopes to achieve through part-night lighting schemes.
- Leicestershire County Council is aiming to reduce carbon emissions by 30% by 2014 by dimming and part-night lighting schemes.
- Cornwall County Council hopes to save up to 4,700 tonnes of CO₂ per year due to part-night lighting and dimming trial.

# 11 COUNCILS OUT OF 32 SAID DIMMING HAD BEEN

LARGELY UNNOTICED

BY THE COMMUNITY



# RECOMMENDATIONS

#### **CPRE** proposes:

# 1 Light pollution policy

All local authorities should have a policy to control light pollution in their Local Plan, in line with the National Planning Policy Framework and the associated National Planning Practice Guidance on light pollution. This should include identifying existing dark areas that need protecting.

# 2 Street lighting policy

Local authorities should consider preparing a Street Lighting Policy, which could include Environmental Lighting Zones to ensure that the appropriate lighting levels are used in each zone, with very strict requirements applying in identified dark areas.

# Part-night lighting schemes

We encourage local authorities to investigate how partnight lighting schemes (e.g. switching off between midnight and 5am) or dimming could work in their areas, including examining the cost, energy and carbon savings. This should be done in full consultation with the local community.

## 4 LANTERNS research project

All local authorities who are switching off or dimming street lighting should monitor crime and accident statistics and consider taking part in the Institution of Lighting Professionals/LANTERNS research project which aims to quantify any effects of changes to street lighting on road traffic accidents and crime.

# 5 LED lighting

Local authorities should give careful consideration to the type of Light-Emitting Diodes (LED) lighting they use and consider the potential impacts that higher temperature blue rich lighting has on ecology and on human health.

# 6 Targets for replacing lights

Local authorities with responsibility for street lighting could set targets for replacing all their street and road lights with less light polluting types, such as full cut off flat glass lamps.

## **7** Testing new street lighting

New street lighting should be tested 'in situ' before a lighting scheme is rolled out across a wider area to ensure that it is the minimum required for the task and does not cause a nuisance to residents.

## 8 Preserving dark skies

Local authorities should have a strong presumption against new lighting in existing dark areas, unless essential as part of a new development or for public safety reasons that have been clearly demonstrated.

#### 9 Highways Agency guidance

The Highways Agency should review the lighting section of the Design Manual for Roads and Bridges, which is used to design motorway and trunk road lighting, to ensure it remains relevant for local authorities.

CPRE fights for a better future for England's unique, essential and precious countryside. From giving parish councils expert advice on planning issues to influencing national and European policies, we work to protect and enhance the countryside, including by tackling light pollution and advocating the value of dark skies.

We believe a beautiful, thriving countryside is important for everyone, no matter where they live. We don't own land or represent any special interests. Our members are united in their love for England's landscapes and rural communities. We stand up for the countryside, so it can continue to sustain, enchant and inspire future generations.

#### **OUR OBJECTIVES**

We campaign for a sustainable future for the English countryside, a vital but undervalued environmental, economic and social asset to the nation. We highlight threats and promote positive solutions. Our in-depth research supports active campaigning, and we seek to influence public opinion and decision-makers at every level.

#### **OUR VALUES**

- We believe that a beautiful, tranquil, diverse and productive countryside is fundamental to people's quality of life, wherever they live
- We believe the countryside should be valued for its own sake
- We believe the planning system should protect and enhance the countryside in the public interest



5-11 Lavington Street London SE1 0NZ

**T** 020 7981 2800 **F** 020 7981 2899 **E** info@cpre.org.uk **www.cpre.org.uk** 

**y**@CPRE

Registered charity number: 1089685 CPRE is a company limited by guarantee registered in England, number 4302973 July 2014 CPRE gratefully acknowledges the kind financial support of both Thurstan Adburgham and The Seven Pillars of Wisdom Trust that made this leaflet possible.

For more information on how to take action against local light pollution go to www.cpre.org.uk/lightpollution



www.cpre.org.uk