

With the combined pressures of rising energy prices and the need to reduce emissions to prevent dangerous climate change, action is required to reduce energy consumption in street lighting.

A number of options have been assessed, the most cost-effective solution is to follow the lead of the Highway Agency and turn off non-essential street lighting from **12:30am to 5:30am**.

It is estimated that this could save up to **4,000 tonnes of CO₂** and reduce the present energy bill by **£450,000**. These emissions savings would go a long way to meet both national and local emissions reduction targets.

See the stars

In addition to the carbon and money savings, 'sky glow' or light pollution will be significantly reduced allowing for better viewing of the stars and the moon in the night sky.



Working together

The County Council has been working with Devon & Cornwall Constabulary who understand that part-night lighting may give rise to concerns in some communities and as such will be working with the County Council to ensure that the decision-making process includes considerations of crime, disorder and road safety in residential areas. Working together, Devon County Council and Devon & Cornwall Constabulary are aiming to reduce carbon emissions.

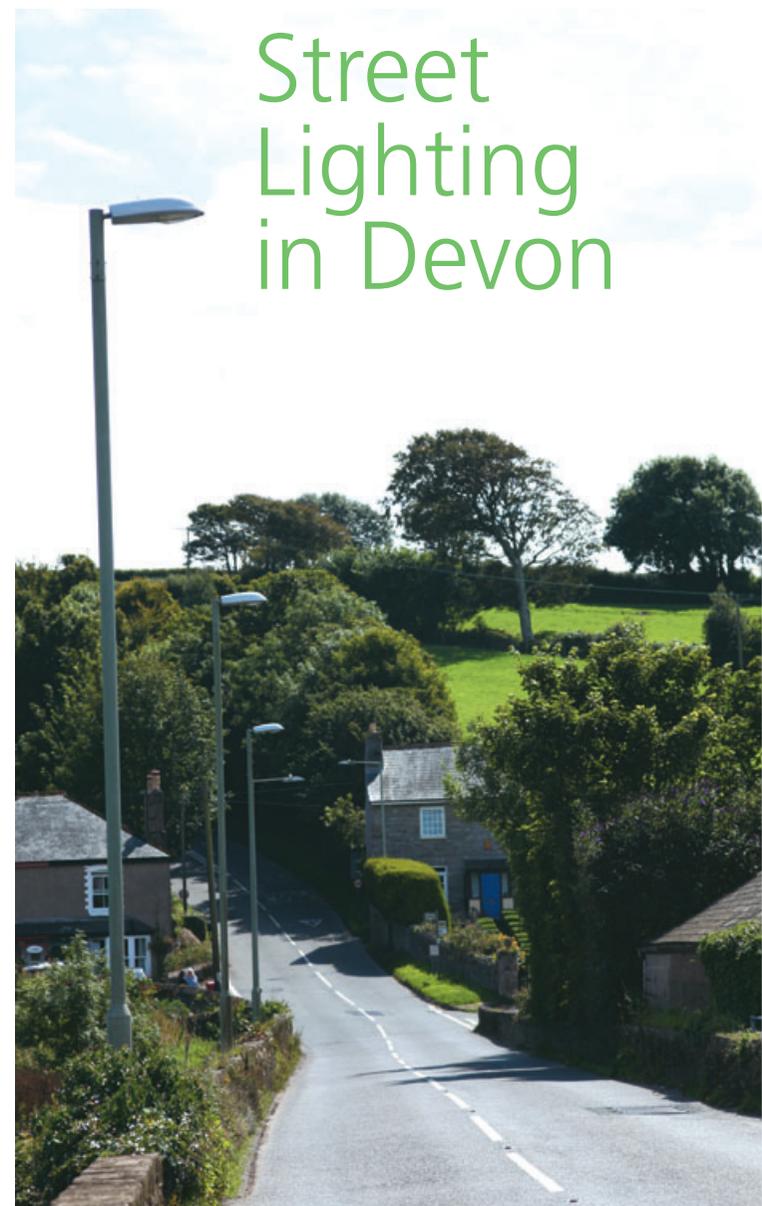
DCC is encouraged that the part-night lighting schemes already installed in some parts of Devon work well, and that some communities are already coming forward asking to be included in the street lighting carbon reduction programme.

Contact us



Save Carbon, Save
Money, **See the Stars!**

June 2011
jn01220 Corporate Comms Design Service



Street Lighting in Devon

Devon County Council has a programme to change its street lighting policy.

This programme forms part of Devon County Council's (DCC) carbon reduction and management strategy.

There will be phased options for street lighting across the county:

- **Phased part-night lighting in residential areas.** Meaning that the hours some streetlights are on will be changed from all-night long to lighting between dusk and 12:30am and again from 5:30am until dawn.
- **Lighting in areas of high night-time activity,** such as town centres, will remain lit all night, but consideration will be given to dimming lighting where possible.
- **Main road lighting** will be subject to risk assessments which will determine whether they remain lit all night, are converted to part-night lighting or are dimmed.

By switching lights off between **half-past midnight** and **5:30am** and dimming other lighting, energy consumption, carbon emissions and energy costs are expected to reduce by a third at the end of the programme.

The conversion of lighting from all-night to part-night operation will be carried out over a five year period from 2010 (or shorter) across

the county and will initially be included as part of planned maintenance operations, to keep costs to a minimum.

Factfile

- The County Council is responsible for nearly **75,000 streetlights**, which consume **37 million kWh of energy**, which in turn produces nearly **20,000 tonnes** of **CO₂** annually.
- The present annual cost of electricity for street lighting is approximately **£2,200,000**.
- This is the equivalent to the total annual energy use of **7,300** average Devon homes - a town about the size of Honiton!
- The cost to convert a street light is about **£20 to £30**, and the energy saving covers this cost within about **3 years**, so the part-night solution is a cost effective way to cut our carbon emissions.

Doing it for Devon

Save carbon

We have already seen a **1 degree Celsius temperature rise** in Devon and a **2 degree rise** is now inevitable. **30%** of the UK's carbon dioxide emissions come from fossil-fuelled



electricity generation. As a result, the Government has initiated a mandatory carbon trading scheme the 'Carbon Reduction Commitment' for large private and public sector organisations. Devon County Council is included in this largely due to its significant energy consumption in street lighting.

The aim of this scheme is to reduce carbon dioxide emissions by putting a price on carbon. Devon County Council's annual emissions total almost **62,000 tonnes of CO₂**, of which street lighting accounts for about **30%**.

Save money

To buy the pollution permits needed in **2011** for street lighting alone will cost Devon County Council over **£200,000** on top of the annual energy cost for street lighting of **£2.2 million**.