# RENEWABLE ENERGY FOR THE THWING AND OCTON PARISH

**STREET LIGHTING**

HOUSEHOLD INFORMATION

**Do you want to help reduce carbon pollution?**

**Do you want to help reduce light pollution and enjoy beautiful night skies?**

**You Parish Council would like to seek funding to replace our out of date street lights with solar powered energy efficient LED lights incorporating sensors which dim the lights until needed by approaching vehicles or pedestrians.**

**We would welcome your views and ask that you complete this short questionnaire.**

**Would you support the Parish Council with its plans to upgrade the lighting to sola LED?**

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| --- | --- | --- |
| ⬜ Yes  | ⬜ No |  |
| Comments \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

**Would you like additional lighting or Less within the village?**

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| ⬜ Happy with the existing lighting positions. |
| ⬜ More lights are required ⬜ No, what we have are enough. |  |
| If Other, ? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

**Would you support a dark sky initiative within the Parish?**

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| ⬜ Yes  |
| ⬜ NoComments   |  |

**Do you have any other comments about Street Lighting within the Parish?** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

STREET LIGHTING

DESCRIPTION OF THE TECHNOLOGY

Standalone solar PV powered LED lights are the leading solution to high-efficiency, renewables-integrated streetlights and are widely used in the UK. These units have no connection to the grid (or each other) and instead generate their electricity from individual solar PV panels located on top of the unit

Each streetlight system has a battery incorporated into the unit which allows it to store the electricity produced in the day and release it during the night when it’s required. Through the highly efficient LED bulbs and smart infrared sensors (which dim the lights when not in use and brighten them when pedestrians and cars pass), the units have built-in batteries that can run for up to a week without sunlight to fully recharge.

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| **Advantages** |
| Low carbon energy source |
| Minimal maintenance requirements |
| Long operational lifespan (>50,000 hrs) |
| No external fuels or connections required |
| Well established technology |
| Smart sensors dimming lights when not in use – less light pollution |
| White light for greater visibility |

SUITABILITY TO THE AREA

There is a good case to replace the existing streetlights with solar powered streetlights due to their environmental and efficiency benefits, ease of installation, greater visibility and reduction in all night light pollution. Also, running costs will be significantly reduced as the parish will no longer need to pay for electricity to keep the lights on.

PV-powered streetlights can be provided in two varieties, one that uses existing poles and one that has a new pole incorporated to it.