

# Supporting information provided by the petitioner

## Campaign for Dark Skies Petition – Supporting Information

*"The Campaign for Dark Skies deserves wide support during this special year [2009, International Year of Astronomy]. But it's not just astronomers who want to experience a clear view of the stars, just as it's not just keen ornithologists who would feel deprived if song-birds disappeared from parks and gardens. It's indeed a deprivation if young people living in cities never see a dark starry sky - just as it is if they never see any natural countryside."*

**Sir Martin Rees, Astronomer Royal,  
at the UK opening of the International Year of Astronomy 2009.**

The Campaign for Dark Skies (CFDS) petition is the culmination of a series of International Year of Astronomy events at the National Assembly for Wales. Members of the Cardiff Astronomical Society (CAS) & CFDS held events to raise awareness of astronomy throughout the year and, in July, held an event in the Senedd. At that event Nick Ramsay AM agreed to host a seminar on light pollution at the Assembly. CAS and CFDS held that event in October and helped raise awareness of light pollution with AMs, Ministers and members of the voluntary sector from across Wales.

The aim of the petition is to persuade the Welsh Assembly Government to tackle light pollution head on, by ensuring that only developments with properly designed lighting are given planning permission. Light pollution has been a growing problem since the 1950s and now less than 10% of the UK's population have an unspoilt view of the night sky as wasted light is blotting out all but the brightest stars in a smog of orange glow. Unfortunately, the once commonplace sight of the beautiful disk of our galaxy stretching overhead is denied to most people. There are children alive today who have never witnessed the magnificent sight of the Milky Way spread across the night sky and will never experience the sense of awe and wonder of the Universe. Thankfully, parts of Wales are free from the blight of wasted light, in fact the UK's centre for monitoring the potential threat to earth from asteroids has moved to Knighton<sup>1</sup> as the skies over Cambridge became too light polluted. It is our aim that these dark skies in Wales will be protected and we hope to reverse the pollution over our cities.

50 years ago Wales saw the creation of the UK's first Area of Outstanding Natural Beauty on the Gower Peninsula; the night sky is also an area of outstanding natural beauty and deserves the same protection. Wales has a chance to take the lead in tackling the problem of wasted light. We are not asking for everywhere to be plunged into darkness just for lighting to be shone where it is needed and wanted. Properly designed lighting delivers light where it is needed, not upwards into the night sky. This is also important from an energy saving standpoint. It is estimated that we waste around £120m per year on street lighting which light up the sky rather than the streets. In total we could be spending up to £1bn in the UK every year on wasted light. A single 100-watt bulb burning for all hours of the night for one year creates a quarter of a ton of carbon dioxide, with world governments trying to agree on how we can halt global warming can we really afford the half a million tonnes of CO2 it costs us to perpetuate the orange glow above the UK?

The night sky is part of our environment and needs protecting, the Government must take action before it's too late. We wouldn't stand by and let a 10 lane motorway be built across the Brecon Beacons, so why should we let the wonders of our universe be hidden by an horrendous orange smog?

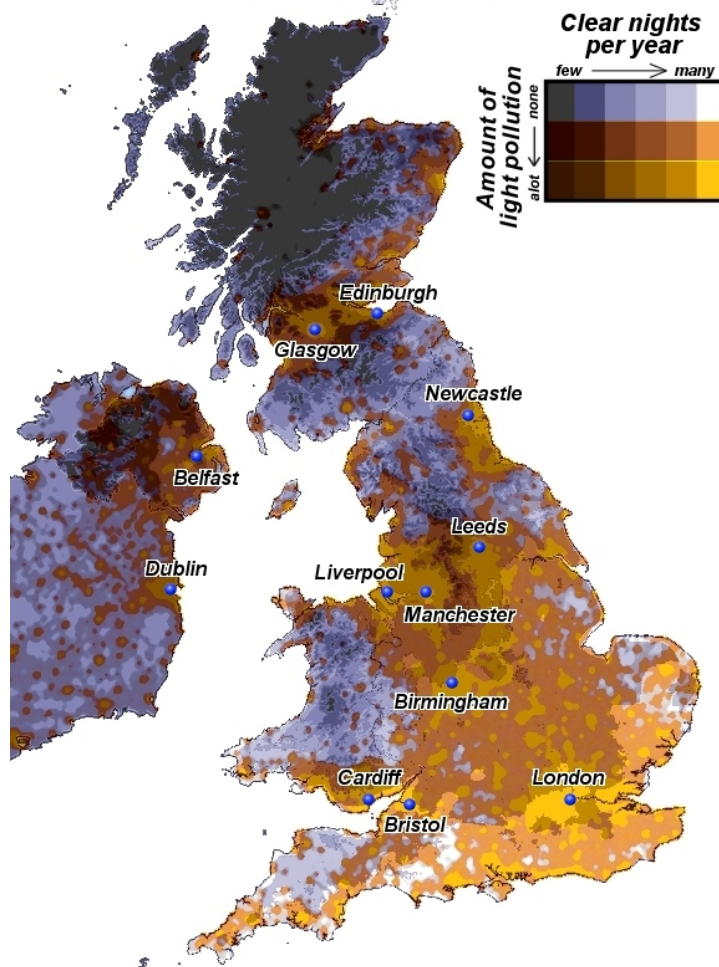
We need to ensure that future generations will be able to see and appreciate the night sky, to see light from stars that has travelled for billions of years and to share the same sense of awe & amazement that mankind has been experiencing since the dawn of time.

Mark Major  
Regional Information Officer (Wales)  
Campaign for Dark Skies

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<sup>1</sup> <http://news.bbc.co.uk/1/hi/wales/mid/7193928.stm>

## ***The UK's best places to see the rest of our Universe***



As you can see, Wales has some of the darkest skies in the UK and some of the most light polluted. The National Assembly for Wales can, through planning guidance, halt the spread of light pollution thus protecting our night environment. Scotland has marketed their dark skies by applying for special Dark Sky<sup>2</sup> status and as a result hopes to attract over a million visitors a year.

<sup>2</sup> <http://www.guardian.co.uk/science/2008/dec/23/astronomy-galloway-dark-sky-park>

Letter from the Minister for Environment, Sustainability and Housing

**Jane Davidson AC/AM**

**Y Gweinidog dros yr Amgylchedd, Cynaliadwyedd a Thai  
Minister for Environment, Sustainability and Housing**



Llywodraeth Cynulliad Cymru  
Welsh Assembly Government

Eich cyf/Your ref P-03-260  
Ein cyf/Our ref JD/00602/10

Christine Chapman AM  
Chair - Petitions Committee  
National Assembly for Wales  
Cardiff Bay  
Cardiff  
CF99 1NA

16 March 2010

*Dear Chr,*

Thank you for your letter of 2 March following receipt of a petition on light pollution and supporting information submitted by the Campaign for Dark Skies.

The Welsh Assembly Government recognises that light pollution can be both a natural environment and a climate change issue. Although it is not an area on which a formal position has been developed the Assembly Government is taking steps to tackle it by promoting energy efficiency. To this end, I am developing a Climate Change Strategy for Wales which will show not just how the Assembly Government but all sectors in Wales will contribute to reducing emissions and adapting to the impacts of climate change. Local authorities in Wales have already received guidance and support on energy demand reduction strategies from the Carbon Trust's Local Authority Carbon Management scheme. Most local authorities in Wales will be included in the new Carbon Reduction Commitment Energy Efficiency Scheme which starts on 1 April this year. It is a new scheme for the UK which will drive energy efficiency through behaviour and infrastructure change.

The Welsh Assembly Government is also responsible for establishing the planning framework in Wales and our policies are set out in Planning Policy Wales. Our policy recognises that there is a need to balance the provision of lighting to enhance safety and security to help in the prevention of crime and to allow activities like sport and recreation to take place. This is with the need to protect the natural and historic environment including wildlife; retain dark skies where appropriate; prevent glare and respect the amenity of neighbouring land uses. The impacts of any proposed development should be assessed by a local planning authority in coming to its decision. We expect local planning authorities to include policies for lighting and the control of light pollution in their development plans.

Bae Caerdydd • Cardiff Bay  
Caerdydd • Cardiff  
CF99 1NA

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*Wedi'i argraffu ar bapur wedi'i ailgylchu (100%)*

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In summary, the Welsh Assembly Government supports the Campaign for Dark Skies' objective of switching off unnecessary or wasteful lighting, and measures are already in place to address the issue.

Yours,



**Jane Davidson AM**

Y Gweinidog dros yr Amgylchedd, Cynaliadwyedd a Thai  
Minister for Environment, Sustainability and Housing

# Response from the WLGA

Our Ref/Ein Cyf: ST/SJ  
Your Ref/Eich Cyf:  
Date/Dyddiad: 12 May 2010  
Please ask for/Gofynnwch am: Steve Thomas  
Direct line/Llinell uniongyrchol: 029 2046 8610  
Email/Ebost: steve.thomas@wlga.gov.uk



Christine Chapman AM  
Chair  
Petitions Committee  
National Assembly for Wales  
Cardiff Bay  
CF99 1NA

Dear Christine

## **PETITION: P-03-260 Campaign for Dark Skies**

Thank you for your Petition dated 5<sup>th</sup> May 2010. You have asked for our observation on the views on the Campaign for Dark Skies. The Campaign makes some fair points in terms of light pollution and in straightened financial times you can be assured that local authorities are looking to both cut down the cost of street lighting and more efficiently use new technologies.

That said you will also aware of the huge controversy generated around Welsh local authorities from decisions to actually switch off street lights often on the basis of environmental criteria which we then find the public vehemently disagree with. Can I quote recent examples in Powys, Blaenau Gwent and Ceredigion. As such perhaps it is the role of the Petitions Committee to also seek their views in addition of the vociferous public campaigns to maintain current levels of street lighting across Wales. This is by no means as straightforward as your petition suggests and is a subject that is essentially contested. As such I hope these comments assist your deliberations.

Yours sincerely,

**Steve Thomas**  
Chief Executive / Prif Weithredwr

Steve Thomas  
Chief Executive  
Prif Weithredwr

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[www.wlga.gov.uk](http://www.wlga.gov.uk)



Christine Chapman  
Chair, Petitions Committee  
National Assembly for Wales  
Cardiff Bay  
Cardiff  
CF99 1NA

23 August 2010

Dear Christine

**Re: Petition: P-03-260 Campaign for Dark Skies**

Thank you for the opportunity to comment regarding this petition.

The Carbon Trust has worked in partnership with the public sector in Wales for the last 9-years both at individual organisation and LSB level. As such many of these organisations have progressed through our Carbon Management Programme. This programme takes organisations through a process which includes measuring their Carbon Footprint, identifying carbon reduction opportunities and developing a strategy and implementation plan.

A key element of the Welsh Assembly and Local Authority footprint is external lighting and streetlighting. Built into carbon reduction plans are opportunities to optimise the utilisation of such lighting. In the main the recommendations focus on the refurbishment of inefficient lighting by either, replacing the lamps with a more efficient equivalent, the replacement of complete lighting columns, and the installation of efficient lighting control systems. Our aim is to ensure that, where necessary, lighting is provided in the most effective and economic manner.

With the new more efficient lighting systems light pollution is reduced through design. Many of the new lighting systems are designed to 'punch' the light downward and target the light where it is needed thus reducing the amount of diffused light which would have been wasted and create light pollution.

Control systems enable smarter switching and in some cases the opportunity of dimming lights. The controls can offer a flexible regime for the overall lighting strategy and some organisations have trialled dimming lights, only utilising every other light during quieter periods or switching off lighting systems in the early hours of the morning in non-strategic areas.

Throughout our work with the Local Authorities, Local Service Boards and the Welsh Assembly Government we actively encourage knowledge sharing by learning from the experience gained throughout Wales and the rest of the UK by highlighting the advantage of these new technologies and the benefits of this replicable programme.

**THE CARBON TRUST**

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Registered at 6<sup>th</sup> Floor, 5 New Street Square, London EC4A 3BF



Once again, thank you for the opportunity to comment. If you have any questions or require any further information, please do not hesitate to contact me.

Yours sincerely

Mike Batt  
Manager-Wales



Christine Chapman  
Cadeirydd, Pwyllgor Deisebau  
Cynulliad Cenedlaethol Cymru  
Bae Caerdydd  
Caerdydd  
CF99 1NA

23 Awst 2010

Dear Christine

Parthed: Deiseb: P-03-260 Ymgyrch dros Ffurfafen Dywyll

Diolch am y cyfle i wneud sylwadau ar y ddeiseb hon.

Mae'r Ymddiriedolaeth Garbon wedi bod yn gweithio mewn partneriaeth gyda'r sector gyhoeddus am y 9 blynedd diwethaf ar lefel sefydliadau unigol a Bwrdd Gwasanaeth Lleol. Fel y cyfryw mae nifer o'r sefydliadau hyn wedi symud yn eu blaenau drwy'r Rhaglen Rheoli Carbon. Mae'r rhaglen hwn yn tywys sefydliadau drwy broses sy'n cynnwys mesur eu Hôl Troed Carbon, nodi cyfleoedd i ostwng carbon a datblygu strategaeth a chynllun gweithredu.

Elfen allweddol o ôl troed Llywodraeth y Cynulliad ac Awdurdodau Lleol yw goleuadau y tu allan a goleuadau stryd. Mae cyfleoedd wedi'u clustnodi mewn cynlluniau gostwng carbon i wneud y gorau o ddefnydd y fath olau. Yn bennaf, mae'r argymhellion yn canolbwyntio ar ailwampio goleuadau aneffeithlon drwy un ai, gyfnewid y lampau gyda rhai mwy effeithlon, newid y colofnau goleuadau'n gyfan gwbl, a gosod systemau rheoli goleuadau effeithlon. Ein nod yw sicrhau caiff golau ei ddarparu ble mae ei angen yn y dull mwyaf effeithlon ac economaidd.

O ganlyniad i'r systemau goleuo newydd sy'n fwy effeithlon, ceir gostyngiad mewn llygredd golau. Mae nifer o'r systemau goleuo newydd hyn wedi'u dylunio i 'fwrw'r' golau ar i lawr a thargedu'r golau ble mae ei angen, gan ostwng y golau tryledol fyddai'n cael ei wastraffu a chreu llygredd golau.

Mae systemau rheoli'n caniatáu switsio clyfar ac mewn rhai achosion, cyfle i bylu golau. Gall y rheolyddion gynnig system hyblyg ar gyfer y strategaeth golau'n gyffredinol ac mae rhai sefydliadau wedi treialu pylu goleuadau, gan ddefnyddio bob yn ail olau'n unig yn ystod cyfnodau tawel, neu droi systemau golau i ffwrdd yn oriau man y bore ac mewn ardaloedd an-strategol.



Drwy ein gwaith gyda'r Awdurdodau Lleol, Byrddau Gwasanaeth Lleol a Llywodraeth Cynulliad Cymru rydym wrthi'n weithredol yn annog cyfnewid gwybodaeth am y profiadau a enillwyd ledled Cymru a gweddill y DU drwy dynnu sylw at fanteision y technolegau newydd hyn a buddion y rhaglen dyblygiedig yma.

Unwaith eto, diolch am y cyfle i gael gwneud sylwadau. Os oes gennych gwestiynau neu os ydych angen unrhyw wybodaeth bellach, mae croeso i chi gysylltu â mi.

Yr eiddoch yn gywir

Mike Batt  
Rheolwr-Cymru



Response from Powys council



**Jeremy Patterson,**  
**Prif Weithredwr**  
**Chief Executive**

County Hall / Neuadd y Sir,  
Llandrindod Wells,  
Powys  
LD1 5LG

*If calling please ask for / Os yn galw gofynnwch am*

Christine Chapman AM,  
Chair, Petitions Committee,  
National Assembly for Wales,  
Cardiff Bay,  
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Mr. J.R. Patterson  
Tel / Ffôn: 01597 - 826082  
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Email / Llythyru electronig: [jeremyp@powys.gov.uk](mailto:jeremyp@powys.gov.uk)  
Our ref / Ein cyf: JRP/CE.35/023  
Date / Dyddiad: 25 January 2011

Dear Ms. Chapman,

**P-03-260 Campaign for Dark Skies**

Thank you for your letter dated 14<sup>th</sup> January, regarding the petition which calls for the problem of light pollution to be tackled.

Powys County Council took the decision to reduce the energy budget on street lighting in the summer of 2008. The outcome of this was that by the end of that year, 7000 of our 14000 street lights had been turned off. However, following a review which took account of a number of concerns, the Council revised its policy to focus on part-night lighting, in which the light goes off between 00:30 and 05:30 in the morning. This met the concerns but still addresses savings in terms of CO<sub>2</sub> and cost. Currently, of our total street lighting stock a third are on all night, a third part-night and a third off completely. Since we made these changes 2 years ago we have noticed that the complaints are getting fewer and that part-night lighting seems to be the most favourable option to the public - especially in rural areas.

In the last 2 years we have also been trialling various types of LED lanterns and lamps with varying degrees of success. We have now installed about 500 and have been very pleased with the comments from the public and also on other factors such as light pollution and energy savings. We have been so impressed that we now ask that LED's are specified on all new developments in Powys. Indeed the council has agreed to invest in the use of LED's and allocated funds so that a number of lights can be re-energised, either all night or part-night, by replacing conventional lights and using the accrued energy savings.

I trust that the above response will be helpful to the Committee.

Yours sincerely,



**Jeremy Patterson**  
**Chief Executive**

*gwella ansawdd eich bywyd*  
*improving your quality of life*

8 AN

Further response from Powys CC



**Jeremy Patterson,**  
**Prif Weithredwr**  
**Chief Executive**

County Hall / Neuadd y Sir,  
Llandrindod Wells,  
Powys  
LD1 5LG

*If calling please ask for / Os yn galw gofynnwch am*

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National Assembly for Wales,  
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Email / Llythyru electronig: [jeremyp@powys.gov.uk](mailto:jeremyp@powys.gov.uk)  
Our ref / Ein cyf: JRP/CE.35/029  
Date / Dyddiad: 01 February 2011

Dear Ms. Chapman,

**P-03-260 Campaign for Dark Skies**

Following my letter dated 25<sup>th</sup> January I have now received some further feedback from the Council's Board on the matter of street lighting and the Campaign for Dark Skies.

The Board would like to draw to your attention the significant amount of local concern regarding the Welsh Assembly Government's street lighting policy on Trunk Roads. Whereas the Council has taken measures to tackle both light pollution and energy use, the Welsh Assembly Government appears to continue to provide excessive levels of light, especially in rural locations. There are numerous examples of excessive light in Powys and the Council would gladly provide examples if you require them.

Yours sincerely,

**Jeremy Patterson**  
**Chief Executive**

AS AM

Response from Ceredigion CC

Cyngor Sir CEREDIGION

Miss Bronwen Morgan, LL.B.  
Prif Weithredwr  
Chief Executive



CEREDIGION County Council

Neuadd Cyngor Ceredigion, Penmorfa, Aberaeron, SA46 0PA

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Dyddiad  
Date

1<sup>st</sup> February, 2011

Fy nghyf  
My ref

BM/SAT

Fich cyf  
Your ref

P-03-260

Christine Chapman AM,  
Chair, Petitions Committee,  
National Assembly for Wales,  
Cardiff Bay,  
CARDIFF,  
CF99 1NA.

Dear Christine Chapman,

### **P-03-260 Campaign for Dark Skies**

Thank you for your letter dated 14<sup>th</sup> January, 2011 regarding the above.

Ceredigion County Council has been taking positive steps to maintain and improve the quality of the night sky for many years. It now has fewer street lights than all but one mainland lighting authority. It is actively engaged in a wide range of projects to make further improvements.

These include part night lighting, trimming, dimming and replacing old street lighting lanterns.

Part night lighting was implemented after consultation with local community councils and the police. All parties had their own specific concerns and perceived risks. These were addressed by allowing communities to fund the cost of keeping individual lights on if they wish. Considering the needs of CCTV cameras, turning lights back on in response to police requests and continuing to light primary town centre routes. The initial and continued response from all parties has been generally favourable. Three thousand six hundred street lights are now turned off between approximately midnight and 5am each night. Carbon emissions have been reduced by 40% annually and electricity costs have been reduced by £50K per annum.

Trimming is the term used for adjusting the light level at which street lights turn on and off. Traditionally these levels were set to allow for the long "warm-up" period street lights needed. New types of lamps and L.E.D's do not require time to reach full output. They can be switched on later and off earlier using photo cell controls with the appropriate settings. Ceredigion uses trimming to reduce the operating times of new lighting by about 52 hours per annum. The measure generally goes un-noticed. Savings are significant when applied to thousands of lights.

Dimming equipment is installed in all new major road lighting schemes on trunk roads through Ceredigion. These are owned by the Welsh Assembly Government and managed by us. They are designed to meet a wide range of criteria and according to the amount of traffic flow a road has. Using dimming technology, we match the amount of light required to the traffic flow at different times of the night. This reduces running costs and light pollution. If a new lighting scheme is correctly designed to providing uniform lighting regardless of the actual lighting level, the dimming generally goes unnoticed by the public. If an older lighting scheme which has not been designed to provide uniformity is dimmed in this way, the result is a pattern of light and dark patched along the length of a road. This causes a drivers eye to constantly adjust and contributes significantly to driver fatigue. For this reason Ceredigion does not dim lights indiscriminately or, turn off odd lights in a system.

We are continuing with a four year, two million pounds project to replace old street lighting lanterns on footpaths and minor roads throughout the county. The new units emit white light and use sophisticated optical reflectors to direct light onto the ground rather than into the night sky. When they are used in combination with the other measures mentioned above, we have found that they significantly reduce existing light pollution and improve the view of our night sky. The response to these has been very positive with people generally appreciating the removal of the orange glow that can be so noticeable over long distances.

Most lighting authorities such as Ceredigion are fortunate to have small teams of lighting professionals. These people are fully aware of the climate issues that we face and the measures that are available to improve the night sky for everyone. The speed at which these improvements can be made is only limited, as always, by the availability of funding.

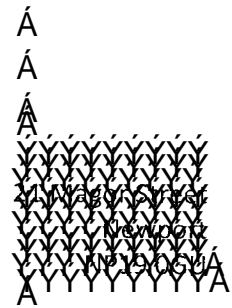
Yours sincerely,



Miss Bronwen Morgan  
**Prif Weithredwr**  
Chief Executive

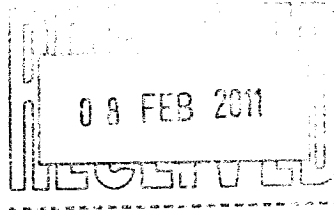
NS AM

Response from the petitioner



Friday, 04 February 2011

Christine Chapman AM  
Chair of the Petitions Committee  
National Assembly for Wales  
Cardiff Bay  
Cardiff  
CF99 1NA



Dear Christine

Thank you for your letter dated 14<sup>th</sup> January 2011 regarding the Campaign for Dark Skies petition (P-03-260).

First of all I would like to thank you, your committee and the clerks for the work you have conducted on this petition to date.

Regarding the information you have received to date, I am deeply disappointed by the responses from the Minister and the WLGA.

The Minister states that the Welsh Assembly Government supports our objective of switching off unnecessary or wasteful lighting and have measures in place to address the issue. Our objective is not to switch off lights; we are calling for a change in how we use lighting.

Artificial lighting is necessary, we do not want to switch off one single necessary light, we want to see the installation of properly designed outside lights which place the light where it is needed; downwards, not upwards or outwards. At least 30% of the light from traditional outside lighting fixtures shines up and out. This is wasted light and across the UK's 9 million street lights, this waste costs us £130m per year and contributes around 580000 tonnes of carbon to the UK's carbon footprint. As stated by the Carbon Trust, we can tackle this by fitting full cut-off lighting and use of smart controlling and dimming.

Regarding the response from the WLGA, we found this totally unhelpful. We have not called for wide-scale switch off and the switch offs referred to by the WLGA Chief Executive were under-taken for cost saving reasons. As stated earlier, we are simply asking for a change in the types of lighting used. There is wide-spread public concern about the reduction of lighting levels and the impact this will have on crime. However, with properly designed lighting we can maintain the lighting levels on the ground and at the same time massively reduce the amount of wasted light.

With regard to the impact of lighting on crime levels, while we cannot underestimate the fears of the public, it must be pointed out that there is no evidence that reduced lighting has an adverse impact on the levels of crime. In Essex, a trial to turn off suburban street lights between midnight and 5.30am, has been deemed a success. Essex Police state: "A year on year comparison for April 2006 to May 2007 [when street-lights were left on all night] and April 2007 to May 2008 [when

*street-lights were turned off at midnight] has shown that night-time crime has almost halved in Saffron Walden and reduced by over a third in Dunmow.*"<sup>1</sup>

A Home Office commissioned report, The Influence of Street lighting on Crime and the Fear of Crime<sup>2</sup> states "The principal conclusion is that no evidence could be found to support the hypothesis that improved street lighting reduces reported crime."

The letter from the Carbon Trust was very useful and I would hope that their response would help form the basis of any future Guidance issued to planning authorities.

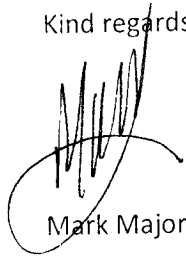
Unfortunately the problem of wasted lighting is not restricted to streetlights; all forms of outside lighting are affected. We believe the only way this can be tackled is through the planning system and if local authorities have a duty to tackle light pollution.

The Clean Neighbourhoods & Environment Act 2005 gives local authorities the power to address light nuisance but there is no power to tackle light pollution. With proper design and education we can ensure that all lighting installations are fit for purpose.

Aside from the environmental benefits achieved through energy saving Wales has an opportunity to protect the night skies. We have some of the darkest skies in Europe and if we start to tackle light pollution now we can protect the dark skies across much of Wales and begin to reverse the skyglow from our towns and cities. Galloway recently became one of Europe's first Dark Sky Parks and they expect to increase visitor numbers to over 1 million per year as a result, astronomers will travel across the world to a truly dark site. We have an opportunity to market Wales as a dark sky nation and tie in to a burgeoning astronomical tourism industry, if we have the foresight to tackle light pollution head-on.

Thank you once again for your continuing support.

Kind regards,

A handwritten signature in black ink, appearing to read 'Mark Major', with a large, sweeping flourish underneath.

Mark Major

Campaign for Dark Skies  
Cardiff Astronomical Society

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<sup>1</sup> See news article <http://www.thisistotalessex.co.uk/news/Essex-lights-project-extends/article-244537-detail/article.html>

<sup>2</sup> <http://www.homeoffice.gov.uk/rds/prgpdfs/fcpu28.pdf>

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Clive Rogers



Cyngor Bwrdeisdref Sirol

**Blaenau Gwent**

County Borough Council

7<sup>th</sup> February 2011

Mrs Christine Chapman AM  
Chair, Petitions Committee  
National Assembly for Wales  
Cardiff Bay  
Cardiff  
CF99 1NA

Dear Mrs Chapman

**RE: PETITION P- 03- 260 CAMPAIGN FOR DARK SKIES**

Thank you for your letter dated 14<sup>th</sup> January 2011 regarding a petition received from The Campaign for Dark Skies and its key aim of reducing light pollution.

In consideration of this petition you are now seeking the experiences of Blaenau Gwent particularly in relation to its current policy of switching street lights off. You have also requested further information as to our current approach relating to the adoption of more efficient forms of lighting.

It is worth setting out the background as to why the Authority took the decision to start switching off street lights within the County Borough. Electricity prices had risen considerably over previous years and along with other budgetary pressures facing the Authority it was clear that a full review was needed in order to address the issue of street lighting energy usage.

A variety of options all aimed at reducing energy consumption was prepared and presented to The Leader and Members of the Executive in 2009.

The option chosen by the Authority was to switch off some 7000 street lights that were fitted with Remote Monitoring Equipment (this being over half of the Council's 12,000 lighting stock) from midnight to dawn, but keeping on any street lights in high risk areas such as Town Centres, principle road junctions and roundabouts, areas covered by CCTV facilities and pedestrian crossings. The report also recommended that monitoring and review of these proposals be undertaken on a regular basis.

This proposed switch off commenced in July 2009 with a full review to be undertaken in September 2009, 3 months after the initial switch off.



BLIDDISODDWR A MESAU POBL  
INVESTOR IN PEOPLE

We welcome correspondence in the medium of Welsh or English. / Croesawn ohebiaith trwy gyfrwng y Gymraeg neu'r Saesneg.



Prior to the commencement of switch off a Neighbourhood Management Joint Tasking Group made up of Officers from Gwent Police, Blaenau Gwent Technical Services and Community Safety Team was tasked with reviewing traffic accidents, anti social behaviour and crime potentially created by the introduction of the new proposals of switching off certain street lights.

By collating this key data of before and after switch off, hard evidence would be available to determine if the proposals had impacted on the level of traffic accidents, anti social behaviour and crime incidents.

From commencement of switch off in July up until September over 200 complaints were subsequently received from the public, elected Members of the Authority, AM and MP and took the form of telephone calls, e-mails, letters and petitions. The majority of these complaints related to the following:

1. Fear of increased crime and anti social behaviour as a consequence of switching lights off in certain areas after midnight.
2. The end of Summer Time with clocks being turned back by one hour and the potential effect of the absence of street lighting during early morning peak flows and particularly the school run.
3. Lights switched off at midnight whilst certain entertainment facilities remained open until after midnight, resulting in members of the public returning home from these venues along streets without no illumination.
4. Concerns particularly from the elderly of potential risks of falling within their own homes (getting up in the night, early morning, walking downstairs, as a consequence of a lack of adjacent illumination i.e street light outside their property.
5. The fairness of the proposals.

The complaints regarding the fairness of the above was as a result of the fact that only 7,000 of the street lighting stock were fitted with remote switching technology and hence could be switched off in line with the adopted policy. The remaining 6000 street lighting units did not have this facility and could not be switched off in line with the policy leaving some areas of the County Borough only minor affected.

Given the large number of complaints received, the Authority agreed to switch back on all lights in residential areas pending a further review of the policy. In concluding its review and taking on board the issues raised by the public, further options were presented to the Executive for due consideration in October 2009.

The favoured option took into account all matters raised above (1-5) even though the Neighbourhood Management Tasking Group found no evidence that traffic accidents, anti social behaviour or crime had increased over the period when lights were switched off.

The Authority accepted the concerns regarding fairness across the County Borough and agreed that the remaining 6000 lights would be converted to allow remote switching and these lights would then be switched off in accordance with the policy.

Whilst there was no evidence to indicate ASB and crime levels were adversely affected by switching off lights there was a perception particularly amongst the elderly that ASB and crime would increase. As a result the Authority decided that only every other light in residential areas would be switched off from 1.00 am and would be switched back on at 5.30am.

Plans indicating exactly which street lights would be switched off were forwarded to all Ward Members for due consideration.

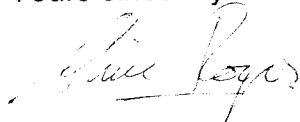
The revised option finally came into effect across the Borough in April 2010, and whilst there were some complaints received regarding specific lights being switched off the Authority did not and has not received anything like the level of complaints originally received.

The current street lighting switch off policy has resulted in considerable financial savings being made along with a reduction in its carbon dioxide omissions. This will also further contribute to the financial savings as a result of reduced payments following the introduction of CRC that comes into force in April 2012.

In terms of the Authority's commitment to more efficient lighting systems we have for many years and in line with lighting industry guidelines been introducing cut off lanterns that minimise peripheral light waste and in more recent times all new and replacement lanterns where appropriate are now fitted with LED lighting. With 100% of the Authority's lighting stock on automatic management control systems, further opportunities will now come available for dimming and trimming of lighting as appropriate.

Reducing energy consumption with all its financial and environmental benefits through the adoption of reduced street lighting usage and introduction of more efficient lighting systems remains a key objective for the County Borough.

Yours sincerely



Clive Rogers  
Chief Technical Officer

Our Ref/Ein Cyf:

Your Ref/Eich Cyf:

Date/Dyddiad:

Please ask for/Gofynnwch am:

Direct line/Llinell uniongyrchol:

Email/Ebost:

ST/SJ

10 March 2011

Steve Thomas

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WLGA • CLILC

Christine Chapman AM  
Chair  
Petitions Committee  
National Assembly for Wales  
Cardiff Bay  
CF99 1NA

Dear Christine

### **P-03-260 Campaign for Dark Skies**

Thank you for your letter received on 7<sup>th</sup> March with reference to the Campaign for Dark Skies. You refer to my previous letter dated 12<sup>th</sup> May 2010 and I am delighted to see that you had a full response from the three councils we highlighted.

You will note from all the responses that councils are looking to introduce new technologies into this arena not least of all the use of LED lanterns and dimming technology. It is noteworthy that in the Powys response there is some concern that such an approach has not been taken by the Welsh Assembly Government in terms of the trunk road network.

You ask us to examine whether the experiences of the three councils contacted are reflected nationally and whether we could respond by the 16<sup>th</sup> March following an examination of their development plans. I apologise but this is not logistically possible in the time available although I am sure that in these straightened times councils will be doing everything within their power to utilise new technologies to save costs. Reducing energy consumption is at the heart of all authorities' sustainable development policies at the current time but the speed in which these improvements can be made are limited as always by the availability of funding.

Yours sincerely,

**Steve Thomas CBE**  
Chief Executive / Prif Weithredwr

Steve Thomas CBE  
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**Jane Davidson AC/AM**  
Y Gweinidog dros yr Amgylchedd, Cynaliadwyedd a Thai  
Minister for Environment, Sustainability and Housing



Llywodraeth Cynulliad Cymru  
Welsh Assembly Government

Eich cyf/Your ref P-03-260  
Ein cyf/Our ref JD/00483/11

Christine Chapman AM  
Chair - Petitions Committee  
National Assembly for Wales  
Cardiff Bay  
Cardiff  
CF99 1NA

14 March 2011

*Dear Chris,*

Thank you for your letter of 3 March 2011 about the petition from Campaign for Dark Skies including correspondence from three local authorities.

I am supportive of any measures that local authorities are taking to reduce climate change and light pollution. I am also aware of several local authority pilots looking at rolling out LED street lighting and other energy saving initiatives. Street lighting is a matter for each local authority as it decides on the service level to provide based upon its own local circumstances. With a growing number of local authorities including the three mentioned in the petition already taking steps to increase energy efficiency, I would welcome this good practice being shared across all 22 local authorities to encourage others to do likewise.

This year, we have made an additional £2.9m available through Salix Finance to support a 'public sector invest to save' programme, under which, local authorities can apply for interest-free loans to cover the cost of measures such as LED street lighting. There is also guidance issued by the Institute of Lighting Engineers entitled '*Street Lighting – Invest to Save*' which makes suggestions that will keep the street lighting lit whilst helping to reduce costs.

In its efforts to promote energy efficiency, the Welsh Assembly Government published a Climate Change Strategy in October 2010. The strategy sets out how individuals, businesses and organisations across Wales can tackle the causes and consequences of climate change. Public sector organisations such as the Assembly Government itself and local authorities have a key role to play in setting out, driving and participating in action designed to reduce emissions and adapt to the impacts of climate change. The Carbon Reduction Commitment Energy Efficiency Scheme, a mandatory cap and trade scheme aimed at large organisations in the private and public sector commenced in April 2010. The majority of Welsh local authorities have registered as full participants. The scheme is a core part of the UK Government's programme to deliver the UK's statutory carbon budgets. Its purpose is to drive energy efficiency and emission reduction through behavioural and infrastructural change and it will contribute to the delivery of the One Wales target of year-on-year 3% emission cuts.

Bae Caerdydd • Cardiff Bay  
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Correspondence.Jane.Davidson@wales.gsi.gov.uk

Local Authorities should also aim to adopt policies for lighting, including the control of light pollution, in their development plans in line with Planning Policy Wales (2002). The Welsh Assembly Government has a role in scrutinising those plans and tries to ensure that national policies are carried through to the local level.

Yours,

  
**Jane Davidson AM**

Y Gweinidog dros yr Amgylchedd, Cynaliadwyedd a Thai  
Minister for Environment, Sustainability and Housing

**Ieuan Wyn Jones AC/AM**  
Dirprwy Brif Weinidog /Deputy First Minister



Llywodraeth Cynulliad Cymru  
Welsh Assembly Government

Eich cyf/Your ref P-03-260  
Ein cyf/Our ref DFM/00552/11

Christine Chapman AM  
Chair - Petitions Committee  
National Assembly for Wales  
Cardiff Bay  
CF99 1NA

14 March 2011

*Dear Christie*

I am responding to your letter of 3 March, on behalf of the Petitions Committee (ref P-03-260), regarding street lighting on trunk roads in Powys.

We take every care not to project unwanted light into the sky. The street lighting that is provided for on the trunk roads are derived from statutory safety requirements to provide sufficient lighting levels for drivers at junctions and roundabouts, and for pedestrian safety in towns and villages. The lighting columns and lamps are designed to specific standards, as set out in the Design Manual for Roads and Bridges. We have no intentions of switching off any trunk road street light as this would decrease the level of required lighting to below the defined standard.

However, we are taking measures on the trunk road network to minimise light pollution as far as reasonably practical, whilst maintaining a lighting standard that is compliant with statutory regulation. We use dimming devices that reduce the illumination between midnight and 5am in conjunction with lamps that are now designed to emit no direct light above the horizontal. We are confident that the future use of LED lamps will further reduce light pollution and use less energy. We are also replacing many lit signs and bollards with un-lit signs that are made visible at night by using the reflection properties from vehicle headlights.

I would be grateful if you could provide me with the examples of the excessive light areas that Powys County Council mention and the standards on which they are basing their claim, so that I can pass these on to my officials to investigate further.

A handwritten signature in black ink, appearing to read 'Ieuan'.

**Ieuan Wyn Jones**  
Gweinidog dros yr Economi a Thrafnidiaeth  
Minister for the Economy and Transport

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