

A RATIONALE FOR THE MANDATORY LIMITATION OF OUTDOOR LIGHTING

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Abstract

The great value of artificial outdoor lighting has largely obscured the social, ecological and environmental problems resulting from present lighting practice. Exponential growth of outdoor lighting has been observed in many countries. It is unsustainable and greatly at odds with the need to reduce greenhouse gas emissions. Artificial skyglow resulting largely from wasteful lighting design and overuse of lighting is increasingly hampering astronomical research, recreation and education and destroying indigenous cultural heritage. Stray light entering bedrooms at night disturbs sleep and contributes to sleepiness and fatigue, known factors in traffic and industrial accidents. Exposure to artificial light at night is a substantial risk factor for prostate and breast cancers, and it appears to be a contributing factor in the obesity epidemic. Outdoor lighting does not inhibit crime but increases it. Even faint light pollution can degrade habitat and affect the food chain over large areas. Drastic reductions in outdoor ambient light levels from all sources, in some indoor lighting and in the associated energy use are justified and will require legislation to be achieved. Present lighting practice needs to be completely rethought.

This paragraph appears on page 36 of 111 pages – in draft and is “confidential”.

At the present stage of knowledge relating exposure to light at night and adverse effects on health, it is tempting to draw a parallel with earlier discoveries of factors with adverse health effects, eg ionising radiation, radioactivity, heavy metals, certain organic compounds, cigarette smoking and **asbestos**. In retrospect, the time lag in each case between initial demonstrations and general acceptance of the hazard seems to be inordinately long. In part, these delays resulted from protests, drawn-out court actions and biased scientific investigations by vested interests. In some cases, rearguard actions continued long after courts had started awarding damages for the illnesses. It is to be hoped in this instance that the appropriate responses will be put in place in a more timely fashion, unpalatable as many aspects will undoubtedly be.

<http://solis.org.au/C1.html>