

Submission to Panel on Education Subcommittee on Integrated Education
Meeting on 8 July 2013
Dr Robert Hanson

There are more School Children who suffer from light disability than there are children in wheel chairs. The lighting industry has tried to limit the number of Children negatively impacted by CFL, LED and florescent lighting to just 1/50. **However, medical experts show the figure to be 1/30 children who suffer learning difficulties under CFL and LED and florescent tube lighting.**

ALL CFL, LED AND FLORESCENT LIGHTING NEEDS TO BE REMOVED FROM SCHOOLS AND REPLACED BY TRADITIONAL INCANDESCENT LIGHTING.

Incandescent lightbulbs produce light of a similar spectrum to daylight. They do not flicker, do not give off radiation and do not contain cancer causing toxins.

CFL and LED lighting produce a light spectrum so different than daylight this causes children to suffer headaches, eyestrain, concentration problems, mental disorders, stress, and skin rashes – al of which impact negatively on learning.

Cancer toxins in CFL and LED lightbulbs make such lighting unsuitable for classrooms and all buildings with centralised air conditioning units and sealed windows – all lightbulb manufactures specifically exclude liability where CFL bulbs are broken under such conditions – this is because the mercury in CFL bulbs is in the form of a vapour which is 1000 times more toxic than mercury in a solid form. Yet many school and public buildings are using this type of lighting in conditions that are putting the health of children and workers at risk – the lighting industry knows of the risk and has excluded all liability for such risk.

Michelle AU and Chistine Loh have been invited to break just four CFL and 4 LEDs under such conditions but have refused to do so. The Environment panel, of which several members of this panel, have also been invited to take this test – none have accepted – but still continue to promote CFL and LED lighting – without informing the public of the differences between CFL and LED lighting and cancer toxins they contain – remember the incandescent bulb, the environment panel and government are trying to ban, contains no toxins and produces a light spectrum the same as natural light – WHY IS THIS PANEL AND THE ENVIRONMENTAL PANEL FAILING IN THEIR DUTY TO INFORM THE PUBLIC OF THE HEALTH RISKS OF CFL AND LED LIGHTING?

Many school children (at least 1/30) are made ill by CFL and LED lighting are unaware of the cause of their illness and reason behind their learning difficulties because this panel, the environmental panel and the government are refusing to inform the public of the differences between lightbulbs and the impact on health and learning lightbulbs have.

It is totally unacceptable that this panel has sat back and allowed green groups – sponsored by the lighting industry – to promote toxic CFL and LEDs that cause learning difficulties in schools – it equates to promoting, and increasing disability in schools.

CFL and LEDs are totally unsuitable for landfills – where they release poisonous toxins which are inhaled by local school children – mercury is a neurotoxin and negatively impacts on the learning ability and sanity of children – why are panel members encouraging poisonous lighting?

CFL and LEDs do not save energy – the industry admits it – promoting CFL and LED lighting simply promotes profit for the lighting industry.

LED lights are not suitable for humans in general but are specifically problematic to school children because LED light is laser light and causes damage to the retina – particularly young children.

Below is a quote from an optician who has identified CFL and LED lighting as a cause of harm to eyes – and in turn learning:

“I am seeing increasing numbers of patients with problems which are caused by low energy lighting.

I have four patients who are badly affected by low energy lighting and whose lives are severely restricted because of this problem. Those in employment have had to be given home working arrangements by their employers because of they cannot tolerate the lighting in their workplaces. None of them is able to go into supermarkets or many other public places. Their lifestyles are limited and they cannot take part in the usual day-to-day activities that we all expect to be able to do because of low energy lighting. Other buildings such as theatres, churches and other public buildings are problems for them and are becoming more so with the increasing use of low energy lighting.

The people I see who are badly affected by low energy lighting are not affected by incandescent light bulbs, which are being withdrawn. Their problem is due to the increasing use of low energy lighting.

The problems are not only restricted to those who are badly affected. I am also seeing more and more patients who have had their eyes tested within the last 6 months or so. They come to me saying that their eye sight has become worse. I test their

eyes and there is no change. My next question is have they changed the lighting in their house? The answer is always yes they have gone over to low energy lighting. I advise them to use incandescent bulbs, at least in the areas where they will be reading.

There are increasing problems in workplaces for people that I am seeing too as employers are encouraged to install low energy lighting.

These problems are not just for me with my patients but for all optometrists. The problem is becoming more widespread and needs to be addressed.

*Dorothy Crystal MCOptom
Eyecare Plus
8 Rodney Street
Edinburgh
EH7 4EA*

ref: <http://spectrumalliance.co.uk/support-from-medical-professionals>

CFL and LED lighting also need to be kept at least 3 feet away from an adults head – more for a child – yet these lightbulbs can be found in school study lamps close to a child's head – the risk is one of brain tumours. Likewise, Professor Magda Havas et al conclude that the risk of cancer from being too close to CFL/ tube lighting increases by a factor of 5 when compared to incandescent lighting see link below to my article summarising the medical and political impacts of CFL and LED lighting:

'Energy saving' bulbs are *the asbestos of the 21st Century*. Just using an 'energy saving bulb' can make you feel tired, cause eye strain, headaches, skin rashes and even skin cancer. If you are exposed to a broken 'energy saving bulb', you run the risk of developing long term cancer of the liver, kidneys and brain. Believing the claim that 'energy saving bulbs' are safe, and save energy, is a bit like believing Blair's claim that Saddam Hussein had weapons of mass destruction.

All 'energy saving' lighting, LED and CFL, harm humans in two ways. First, harm arising from just being close to them; this harm ranges

from just feeling lethargic, to skin cancer. Second, harm from the toxins released when they break exposes people to a risk of a number of cancers in the long term — if you have any doubts about this, ask your Philips sales representative or Greenpeace campaigner to break a couple of high priced ‘energy savers’ and breathe deeply. Not all light is the same. Incandescent bulbs produce healthy light; they mimic the spectrum of natural light, they don’t flicker the same as ‘energy savers’, don’t produce harmful radiation, and don’t contain harmful toxins. In contrast, ‘energy saving bulbs’ contain a cocktail of toxins, produce harmful radiation, produce a lumpy light spectrum, and imperceptibly flicker. The following diagram [coming soon] shows the smooth healthy spectrums of light produced by tungsten incandescent lights compared to the lumpy unhealthy light spectrum produced by LED and CFL lights.

There is a real risk of skin cancer from the radiation CFLs produce. Dr Colin Holden, President of the British Association of Dermatologists, explains this risk as follows:

It is important that patients with photosensitive skin eruptions are allowed to use lights that don’t exacerbate their condition. Photosensitive eruptions range from disabling eczema-like reactions, to light sensitivities that can lead to skin cancer.

In 2011 Andreas Kirchner, Environmental spokesman of the Federation of German Engineers, re-emphasized the mercury problems of CFLs and the electromagnetic radiation they produce:

Electrical smog develops around these lamps. They should not be used in unventilated areas and definitely not in the proximity of the head.

Yet, even schools are using ‘energy savers’ in study lamps that are placed close to a child’s head.

Magda Havas, Associate Professor at Trent University, Canada, similarly warns of the dangers of Electromagnetic Field (EMF) radiation from CFLs:

CFL’s produce a frequency range known to produce adverse effects on one’s health. Teachers who taught in classrooms [with such lighting] had a 5-fold increase risk of cancer (risk ratio 5.1) that was

statistically significant. ... studies with diabetics and people who have multiple sclerosis found that when [such radiation] is reduced their symptoms diminish.

Dr. David Carpenter believes it is likely that up to 30% of all childhood cancers come from exposure to EMFs. Professor Anthony Pinching, Associate Dean and Professor of Clinical Immunology at Peninsula College of Medicine & Dentistry, is aware of the consistency with which a proportion of CFS/ME patients report adverse experiences in settings lit with fluorescent lights:

[F]luorescent tubes have been most likely to cause problems. Note that we are not talking about defective fluorescent tubes, but about a problem resulting from the characteristics of the light emitted when they are functioning as intended.

Dr R. Sarkaney, FRCP MD St Thomas' Hospital, London, believes that the reasons behind people feeling ill under CFL lighting are in part due to the ultraviolet light they emit and also because:

[T]here are other differences between incandescent and fluorescent lights such as the 'spikiness' of the spectrum of emitted light. Thus, it is likely that, whatever UV protection is put into place with fluorescent lights, there will always be a group of patients who react to the fluorescent light and can only tolerate incandescent lights.

Owen Z. Perlman, M.D., is confident that:

[T]here are more people impacted by exposure to CFLs than are in wheelchairs.

Dr. John Hawk, from the St John's Institute of Dermatology, London, has similarly observed:

[A] significant number of people with certain skin disorders such as seborrhoeic eczema and lupus cannot tolerate any form of fluorescent lighting in their vicinity. [Such people] can only tolerate incandescent lighting from tungsten filament bulbs.

Dr Hawk was the SPECTRUM observer at the SCENIHR meeting on Compact Fluorescent Lamps, European Commission, Brussels, in October 2011. After the meeting, Dr Hawk wrote:

It seemed to me that the SCENIHR committee, the UK representatives and I were all of similar mind concerning the potentially adverse effects of the lamps. The lighting representatives (three lighting experts from Philips) tried to modify the overall opinion slightly towards suggesting less harm but were not hugely adamant. The overall feeling of the meeting was that the lamps had a number of potentially adverse effects, mostly for abnormally photosensitive subjects but also somewhat for normal ones, on both skin and eye. ... SCENIHR committee members also suggested that the incandescent lamps may not be particularly more wasteful of energy than the new CFLs.

It is simply wrong when green groups and big government assert that because CFLs only contain a small quantity of mercury a broken CFL cannot harm you. When a CFL is broken, mercury is released in its most toxic and deadly form — as an odourless vapour (very different than mercury in your fillings and thermometers). It also means that you do not immediately realise that you have been poisoned. Mercury accumulates in the body and attacks the vital organs — the brain, liver and kidneys — over a long and prolonged period of time. The following are extracts from the U.S. Environmental Protection Agency issued in June 2010:

Before Cleanup: Air out the room. Have people and pets leave the room, and don't let anyone walk through the breakage area on their way out. Open a window and leave the room for 15 minutes or more. Shut off the central forced air heating/air conditioning system, if you have one. Do not use a vacuum or broom to clean up the broken bulb on hard surfaces. If clothing or bedding materials come in direct contact with broken glass or mercury containing powder from inside the bulb that may stick to the fabric, the clothing or bedding should be thrown away. Do not wash such clothing or bedding because mercury fragments in the clothing may contaminate the machine and/or pollute sewage.

Yet despite these guidelines, bulb companies are still putting out adverts telling you that CFL's only contain a small amount of mercury, or try to mislead you into thinking that their CFL does not contain mercury. Such claims need careful examination. All CFLs, whatever the label says, contain toxic mercury. As Professor Ron Hui points out:

The danger of mercury is measured by its toxicity. Each CFL is a toxic chemical hazard with toxicity thousands times higher than the safety limit. Most of the electronic components and toxic chemicals such as carcinogenic flame-retardant coatings PBDE cannot be recycled.

Similarly Maine DEP tests found that from just one broken CFL:

Mercury concentration in the study room air often exceeds the Maine Ambient Air Guideline has particular significance for children rolling around on a floor, babies crawling, or non mobile infants placed on the floor.

If advertisements for bulb companies are telling you their 'energy saving' bulbs are safe, why the need to issue these guidelines? The answer of course is that 'energy saving' bulbs are not safe — and the bulb companies know it. Governments across the globe committed to banning incandescent bulbs without doing their homework; so they now have to talk out of both sides of their mouths — one side telling you they are safe, and the other side issuing safety warnings in the form of clear up and disposal instructions. Big government is also wary of the power of heavily funded green groups supporting the ban on incandescent bulbs and is scared of the demagogic behaviour they are capable of — it is so much easier to bully the elderly and weak who are not capable of staging elaborate protests or riots.

<http://capitalism.hk/2012/03/08/light-bulb-bans-how-big-government-is-literally-killing-you/#>

and the lamp guide:

<http://thelampguide.blogspot.se/>

And RTHK June 2013 documentary on lighting and health:

<http://programme.rthk.hk/rthk/tv/programme.php?name=tv/hkcc&p=858&d=2013-06-03&e=220169&m=episode>

The gov. refused to take part in this documentary. Dr Kenneth Chan (Civic Party) has not replied to my request to debate the health, learning, educational, and environmental problems caused by CFL and LED lighting **on television** so that the public can see how the claims that CFL and LEDs are safe, save energy, and are good for the environment are completely false. Dr Chan is a member of both the educational and environmental committees and claims to believe in democracy – why won't he let the public allow me the opportunity to cross-examine him on his inaction on these committees to get the truth out to the public and expose the false claims about CFL and LEDs? Running parallel arguments (the gov, green groups and industry have billion dollar budgets to promote poisonous bulbs – those impacted have a budget of zero) is denying the public the much needed information they need. Cyd Ho who is Chair of the environmental committee and also a member of this committee is likewise out of her depth on these issues – why are these committees comprised of people without knowledge to sit on the committee? This is why we have taxpayers subsidising super rich companies like Philips (who sponsor the WWF) to promote cancer bulbs in schools linked to learning disabilities – rather than using this money to help children with disabilities.

The environment and education committees are failing the public by not ensuring the public are fully aware of the bad health impacts of CFL and LED lighting, the damage CFL and LEDs cause to the environment, the false claims about energy saving, and the reason behind the promotion of toxic bulbs – lobbying by the bulb industry to ban low price healthy incandescent bulbs so they can force legislation and charters through governments so that people have to buy their expensive CFL and LEDs – the environment committee and education committees are letting the public down – I CALL FOR ALL MEMEBERS OF BOTH THESE COMMITTEES TO RESIGN DUE TO THEIR INCOMPETENCE IN PROMOTING POISONOUS PRODUCTS TO THE HONG KONG PUBLIC AND THEIR FAILURE TO WARN THE PUBLIC OF THE BAD HEALTH IMPACTS OF CFL AND LED LIGHTING ON HUMANS DIRECTLY AND THE NEGATIVE IMPACTS THEY HAVE ON THE ENVIRONMENT.

Press Release

POISONOUS LED and CLF Energy saving light bulbs

**!!! Serious Health Danger !! Consumer Fraud!!! Corrupt Government?
INCOMPETENT education and environment committees !!**

All LED and CFL energy saving bulbs contain toxins linked to cancer

Energy saving light bulbs poison workers

The bulbs the government are banning contain no toxins

All LED and CFL energy savers emit harmful UVs and blue light that causes poor eyesight, headaches, skin rashes and possible skin cancer

1/30 people are not able to tolerate LED/CFL energy saving lighting

Medical Doctors and Opticians across the globe see patients everyday made seriously ill by LEDs and CFL energy saving lighting

The government knows about the harmful effects of these light bulbs but refuses to inform the general public – it prefers to grovel to the Lighting industry sponsored WWF

Bulb bans and voluntary charters have nothing to do with reducing energy consumption and everything to do with promoting the profits of bulb companies

The industry admits that over their whole lifecycle CFL energy saving bulbs do not save energy

LED and CFL energy savers are not suitable for landfills. Recycling schemes do not work. Over 90% end up in landfills where their mercury and numerous other cancerous toxins enter the water table and food chain

ACT NOW – expose the truth about how the bulb industry paying green groups to pressure governments into promoting poisonous products in your home. The bulbs the government is promoting are harming your family, school children, and poisoning the environment

www.spectrumalliance.co.uk

<http://ceolas.net/#cc21x>

<http://www.dailymail.co.uk/health/article-1378757/Energy-saving-bulbs-release-cancer-causing-chemicals-say-scientists.html>

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