



Society of Light
and Lighting



Department of Energy Security & Net Zero

Consultation on new Ecodesign Requirements for Lighting
Products

**Submission from the Society of Light and Lighting (SLL), a
Division of the Chartered Institution of Building Services
Engineers**

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About the Society of Light and Lighting (SLL)

The Society of Light and Lighting (SLL) is recognised as an authority on lighting and welcomes all who are interested in any aspect of the world of light, lighting, and its design or application. The Society has over 3300 members, with around 70% operating in the UK.

Professional membership is open to those who meet the competence requirements of the Society and have satisfied the membership committee that they have the skills, knowledge and experience appropriate for professional membership. Those members who meet the competence requirements of the Engineering Council are also eligible to be registered with the Engineering Council.

SLL is a learned Society promoting education and knowledge transfer in a variety of ways, including seminars and has an events programme that runs all year round. The Society publishes Guidance and Codes providing best practice advice and is an internationally recognised authoritative lighting industry body.

SLL members design, install, operate, maintain and refurbish lighting systems used in the built environment. Lighting designers, consulting engineers, researchers, students, academics, manufacturers, sales staff and many more all contribute to and are members of the SLL.

The Society strives to be at the forefront of using and developing light as an integral part of a healthy, ergonomic, and sustainable future. The Society provides lighting application guidance in all sectors of the built environment, promotes minimising energy consumption and quality lit environments for people. The Society is one of the global sponsors of ROLAN, which advocates the responsible use of light at night, for environmental, health and energy efficiency reasons.

The Society is a Division of the Chartered Institution of Building Services Engineers.

About the Chartered Institution of Building Services Engineers (CIBSE)

The Chartered Institution of Building Services Engineers, CIBSE, is the professional engineering institution that exists to 'support the Science, Art and Practice of building services engineering, by providing our members and the public with first class information'. With its main office in London, CIBSE has over 21,000 members, around 75% operating in the UK.

CIBSE is the sixth largest professional engineering Institution, and along with the Institution of Structural Engineers is the largest dedicated to engineering in the built environment. Our members have international experience and knowledge of life safety and energy efficiency requirements in many other jurisdictions and work extensively on the systems that control the various engineering systems that keep buildings safe, comfortable and healthy.

CONSULTATION RESPONSE

Executive summary

This is the Society's formal response to the consultation issued by the government on Ecodesign Requirements for Lighting Products. It has been developed with contributions from our wider membership, discussions with other lighting bodies as well as BEIS and DESNZ.

The Society welcomes the intention to save energy and reduce carbon emissions from lighting installations. This is something the Society promotes at every opportunity through its extensive library of professional lighting guidance. It is a key theme of the Society's Code for Lighting, which has just been republished. It emphasises the importance of reducing demand and then using efficient installations and sources throughout.

Whilst fully supportive of the policy intent, the Society considers that the proposals being consulted on are very likely to have severe and serious consequences. The proposed speed of implementation of the proposals is incompatible with the time required for responsible manufacturers to redesign products, test them, get them certified through accredited laboratories and test houses and place them on the market.

This is very likely to result in a large number of sub-standard products being brought to market, possibly supported by unjustified and potentially misleading product data and marking. In addition, responsible manufacturers may look at the requirements and timescales, observe the divergence from global and European Standards and simply withdraw from the UK market. The end result will be a lack of user or consumer choice and potentially even greater problems with sub-standard imports of lighting products.

And this at a time when the government is trying to implement stricter standards for construction products more generally. It is not at all clear how this consultation maps across to the work of the Office of Product Safety and Standards and the development of new Construction Product Regulations in the aftermath of the Grenfell Tower tragedy.

This may lead some manufacturers to wish to pause any response to the ecodesign requirements until they see what is required under the new construction product regulations, which are expected to be consulted on in some form towards the end of 2023, just as the ecodesign regime is expected to come into effect.

Response to the consultation questions on the new Ecodesign Requirements for Lighting Products

Response to consultation questions on Policy Impact

Question 1. *Are there any additional policy impacts (benefits or costs) which have not been captured by our impact assessment? Please provide evidence to support your answer.*

Answer: Yes. There are a series of mistaken assumptions or incorrect statements in the impact assessment, the SLL has contributed to the list of evidence in the joint lighting industry body's document that DESNZ has requested following the LIA/DESNZ/CLASP meeting.

Question 2. *Thinking specifically about the proposed removal of lighting products from the extension of CE recognition to 31 December 2024, what would be the impacts on manufacturers (or other stakeholders) of this? Please provide evidence to support your answer.*

Answer: Suppliers have followed government guidance that allowed CE only marked product to be placed on the GB market until Dec 2024. Removing this extension means that UKCA marking must be applied once this proposed legislation comes into force. The timescale (proposed 15th November 2023) for this relabelling is disruptive to the industry and not possible for many suppliers to comply with.

Dual CE/UKCA can be placed on the market providing the GB products requirements are equal to or higher than the CE requirements.

However increasing divergence has the likely implication that many products will no longer be able to be CE/UKCA dual conformity marked. Products that were once sourced for the whole EU market, including the UK will now need to be specifically sourced, marked and packaged for the UK which will lead to higher product costs due to the very significant reduction in economies of scale. The likely additional impact that some/many products will simply be withdrawn from supply to the UK market. Consumers and end users will thus face higher prices and reduced choice.

The further change to the timescale for removal of CE marking for lighting products will further undermine confidence of the industry in government, being the third significant change in date and would leave many in the industry questioning whether they can rely on and make significant business investment decisions based on any government announcement.

Question 3. *Of the lighting products manufactured in GB, what proportion (and quantity) of these are sold on the domestic market, and what proportion (and quantity) are exported?*

Answer: The only statistical data available is from the LIA, they report that in the year 2022, general lighting sales turnover was £510m, of which export sales were 11%.

Light source sales in 2022 were £66.3m, of which less than 1% were exported.

This later statistic clearly shows that the UK has no export market for light sources (having no domestic manufacturing of lamps, but some manufacturing of light engines) and thus any argument that MEPS could create one is clearly wrong. These data also highlight the UK dependence on imported lamps, which, if the UK adopts unique standards, are likely to need to be made uniquely for the UK market.

Question 4. *How long (in hours) would you estimate it would take a company to understand and become familiar with the proposed changes in legislation set out in the draft Regulations?*

Answer: Assuming the published regulations are clear and unambiguous, to understand the regulations is relatively simple, so may take just two working days (15 hours), but that is not the same as understanding the technical and commercial ramifications for a company, that would likely be 100's of hours. However, once the ramifications are understood, the likely need to redesign products, build new supply chains, set to manufacture, test, market etc is 1000's of hours.

Given this level of investment, the risk assessment would need to address the likelihood of a further change of policy and the potential costs it would impose.

Question 5. *Do you agree with our assumption of 100% additionality? Please give reasons for your answer, supported by evidence where possible.*

Answer: The assumption of additionality is absolutely incorrect as it ignores three significant drivers for higher efficacy light sources to be brought to market within the UK and one for the use of controls.

The 2021 Ecodesign relabelling requirements have already resulted in a limited number of very high energy efficiency light sources entering the market at a speed driven by product development cycles. The new energy labels will naturally drive demand-pull and supply-push of higher rated light sources and has already been seen to do so.

The rise in electricity prices from 13.5p per kWh to 35p per kWh following Russia's invasion of Ukraine will drive considerable demand for energy efficient lighting products – just as the 1973 oil crisis did for cars with better fuel economy. This is likely to result in persistent and permanent change.

Both the public and businesses alike are beginning to realise the urgent need to move towards net zero and at speed and LED lighting is an exemplary low carbon technology.

The 2021 edition of Approved Document L, Conservation of Fuel and Power of the Building Regulations came into force in July 2022 driving further efficiencies. This requires the use of lighting controls which either switch off or dim lighting in rooms that are either unoccupied or adequately daylight.

Response to consultation questions on proposed increases in minimum energy performance standards (MEPS)

Question 6. *Is it achievable to implement a minimum energy performance standard (MEPS) of 120 lm/W six months after the Regulations are published? Please give reasons for your answer, supported by evidence where possible.*

Answer: No. A six month implementation window is absolutely not achievable. Product development cycles / product creation processes are typically 12 months for a minor product upgrade, 18 months for a significant product upgrade and 24 months for a major new product. For most manufacturers products planned for placing on the market in November 2023 would have been designed 12 to 24 months before this date and significant development costs already incurred.

The result of such a short implementation period will be the removal of many types of lamp/module from the market, limiting consumer choice. In some cases, specific lamp and module types will not be available.

Question 7. *Are there any impacts of implementing Tier 1 in late 2023 which have been overlooked by our analysis (particularly for SMEs)? Please give reasons for your answer supported by evidence where possible.*

Answer: Yes. The simple 120 lm/W limit and the allowances proposed do not take account of the many different types of lamps and modules that are currently available on the market. E.g. some LED technologies ("filament" LED) are not suitable for very small, compact lamps, directional lamps etc.

Many of these types of lamps face being removed from the market. LED modules with high CRI, low CCT etc are effectively banned as there are currently no allowances for LED modules.

The effective (but probably unintended by DESNZ) banning of some light source types, especially small ones and high CRI modules (especially small diameter ones) which cannot yet achieve Tier 1 with the allowances proposed will result in significant damage to some manufacturers whose product range is centered around these necessary products – for example domestic/hospitality multi-light source pendants which use G4 or G9 lamps or high end gallery/hospitality/residential lighting that requires high CRI small diameter modules. Enacting the proposal as currently drafted has very negative consequences for consumers and customers and for the circular economy as many existing, installed lighting products will not be able to be maintained.

Additional allowances for LED lamps are needed and allowances for LED modules are critical.

London is a global hub of lighting design with some of the world's leading design practices being based there. These practices work all over the world and thus form a considerable export industry success, in line with other British architectural practices and creative industries. The reduction of product choice, especially in the high end gallery, hospitality, residential and lighting for health and wellbeing will have serious and enduring negative impact on this important industry.

DESNZ's analysis makes no reference to lighting for health, the impacts of lighting on sleep and wellbeing, retail food display lighting (specialist spectra), lighting for horticulture, lighting for animal husbandry, industrial lighting such as paint and glue curing, inspection lighting or printing. It is overly simplistic and the likelihood of unintended consequences is very high.

Question 8. *Is a 3.5% year-on-year improvement in average light source and luminaire efficacy a reasonable assumption? Please give reasons for your answer, supported by evidence where possible.*

Answer: No. The LIA conducted a detailed survey of the globally sized manufacturers in the LED chip supply chain – all stated that the year-on-year efficacy increase was 2% at best.

It is our understanding that the 3.5% figure was achieved by taking an average of CLASP's 5% and the LIA's 2%. CLASP's data source was the US DOE 2019 and 2022 reports which clearly state they use hypothetical data of potential products (for example the use of colour mixing LEDs in white light application – which all the major chip manufacturers are not currently developing) or data irrelevant to the UK market (i.e. its use of 5700K LEDs).

The UK lighting industry can only manufacture or sell products that have purchasable (i.e. not hypothetical) chip technologies of the right type for the UK market (i.e. not 5700K).

Without robust evidence to the contrary year on year chip level efficacy improvement is 2%.

Question 9. *Is the proposal to implement a minimum energy performance standard (MEPS) of 140 lm/W from 1 September 2027 achievable? Please give reasons for your answer, supported by evidence where possible.*

Answer: Potentially, but a proper review is required in 2025. Starting from Tier 1 120 lm/W in 2023, the real year-on-year LED efficacy growth of 2% compound leads to 130 lm/W in the 4 years to 2027. It could be suggested that the motivation for DESNZ to keep to a suggested 3.5% year-on-year efficacy is not based on evidence, but to statistically meet their policy target of 140 lm/W at Tier 2 in 2027.

Tier 2 of 140 lm/W in 2027 would only be achievable by more lamp/module types being banned reducing consumer and professional choice and limiting lighting design.

Before proceeding to Tier 2, a review should be held 2 years after Tier 1 implementation (i.e. in 2025) to determine an achievable Tier 2 MEPS i.e. in 2027 giving a 2 year product development cycle to that Tier 2 in 2027.

Question 10. *Are there any impacts of implementing Tier 2 in 2027 which have been overlooked by our analysis (particularly for SMEs)? Please give reasons for your answer, supported by evidence where possible.*

Answer: Refer to question 9.

Response to consultation questions on other proposed changes

Question 11. *Are there any impacts of removing the Ponmax calculation which our analysis may have overlooked, including any interaction with other policies affecting lighting products, for example RoHS? Please provide reasons for your answer, supported by evidence where possible.*

Answer: Yes. The Ponmax calculation included variables covering:

- Base efficacy
- Correction factors for non-mains vs mains power
- Useful lumens
- Directional or non-directional
- Lightsource type
- Colour rendering index.

Some of these variables were more nuanced under Ponmax, for example the mains/non-mains was a series of curves that plotted non-mains / non-directional, mains-non-directional, non-mains-non-directional and mains-directional against efficacy. Useful lumens also varied between wide beam, narrow beam and non-directional.

The result is that the oversimplification of the allowances, will cause very significant unintended consequences primarily in that some light sources, which for very good technical reasons will have lower efficacy, will fail to meet either MEPS Tier 1 or MEPS Tier 2 and they will thus be banned. These light sources are required in the market and will lead to projects such as galleries having no available source of light or some domestic and hospitality luminaires being unrelampable and thus having significant circular economy impacts.

Flat/stepped limits introduce artificial boundaries that do not reflect the light source technology. This leads to false marketing claims etc with products being rated just below step changes.

Question 12. *Are there any non-LED technologies (for which there is not currently an exemption) which should not be removed from the GB market from late 2023? Please provide reasons for your answer, supported by evidence where possible.*

Answer: Yes: The removal of low-pressure discharge lamps, i.e. fluorescent light sources was already planned for as it was timetabled under RoHS. Whilst it would make most sense keeping to that timetable it is generally seen as being a positive move as effective, affordable, digitally controllable, LED luminaires are widely available. It will encourage those building owners and facilities managers who have not yet replaced their compact and linear fluorescent lamped luminaires to move to lower energy, lower emitted carbon LED products.

For high intensity discharge (HID) lamps, i.e. metal halide and sodium the banning in such a short time frame as November 2023 is a poor policy decision. Especially at these high wattages typically either no, or very poor retrofit light sources are available. The few that are available typically completely change the optical properties leading to glare and light pollution and the luminaire wiring modifications needed for their use renders the luminaire non-compliant to CE or UKCA. The alternative is for the end user, for example a school, sports club or local authority to make an unplanned and unbudgeted upgrade of their scheme from HID to LED with complete new luminaires. Where budgets are tight, the result is usually the use of low cost fittings (which tend to have short lives and are glare sources) or spot replacement which compromises a scheme's integrity.

The other option will be stockpiling of light sources as we know was practiced extensively when tungsten filament lamps were banned.

The proposed ban on OLED is not logical. OLED is not currently used in space lighting at any scale, because its cost per lumen and lumen per Watt ratios are, as yet too low. It is predominantly a display screen technology. The technology is still the focus of R&D, so a banning of its use in general lighting would stifle any market or technological developments in the UK and eliminate any UK led innovation.

Response to consultation questions on allowances for LED technologies with certain characteristics

Question 13. *Do you agree with our definition of a luminaire? Please give reasons for your answer, supported by evidence where possible.*

Answer: No. The reason for the inclusion of luminaires in the draft regulation is unclear. Is it an attempt to only regulate light sources (in this case LED modules) used in "lighting" products where lighting is the primary purpose and not in other containing products? Is it only applicable to LED modules?

What about an LED lamp already installed in a luminaire?

The definition proposed is an old and outdated definition. It does not reflect the industry change from the term 'lamps' to 'light sources'.

If a definition for luminaire is needed, and we do not understand why it is needed, then it should be the latest IEV / CIE definition.

<https://www.electropedia.org/iev/iev.nsf/display?openform&ievref=845-30-001>.

Adopting this definition would remove the need to separately define the term "lamp."

NOTE - If allowances are made applicable to all light sources (as LIA propose) then there is no need for the luminaire definition. The definition of containing product is sufficient.

Response to consultation questions on mains voltage light sources

Question 14. *Do you agree with the proposed definitions of “domestic directional light source” and “domestic non-directional light source”? Please provide reasons for your answer, supported by evidence where possible.*

Answer: Inclusion of the word “domestic” could cause confusion as these lamps are not just used for the domestic market. We would propose to simply move the lumens levels to the allowance table and remove the definitions (as table extract below).

The directional lumen level appears to be too low when compared to the non-directional level. This results in many higher lumen directional types being banned. SLL propose to increase this to 650 useful lumens.

Whilst there is wide support for a 650 lumen threshold, some have argued that it should be 750 lumen because this would equate to the light output of original low voltage halogen light fittings, which are prevalent on the market even now, and would give a closer approximation to the required lighting when retrofitting into an existing property, of which there will still be many in the housing stock in the UK.

ALL light sources (lamps and modules)	Allowance Lm/W
A directional mains light source (DMLS) with useful luminous flux <=650	20
A non-directional mains light source (NDMLS) with useful luminous flux <=1200	20
Directional light source (DLS)	10

Question 15. *Do you agree with the proposed approach to mains voltage light sources? Please provide reasons for your answer, supported by evidence where possible.*

Answer: SLL can accept the 20lm/W allowance for Tier 1, however it is too soon to tell if it would be acceptable for Tier 2. See SLL proposal for a review between Tier 1 and Tier 2.

It was previously proposed to use percentage allowances which then apply equally to Tier 1 and Tier 2.

Response to consultation questions on directional light sources

Question 16. *Do you agree with the proposed approach for directional light sources? Please provide reasons for your answer, supported by evidence where possible.*

Answer: Yes. SLL agrees that an allowance is needed but the threshold should be 650 lumens not 450 lumens, it should also apply to modules.

EPREL is an unreliable data source both in terms of the proven inaccuracy of the unchecked data entries, but also for the fact that it looks at SKUs not sales volumes – so a product selling just 10 units would have equal weighting to a product selling in the hundreds of thousands – therefore it is impossible for DESNZ to state impacts on the market in any accurate way.

To achieve a directional beam, the diameter of the module or chip array must be kept small (good optics require a small light source compared to the size of the lens or reflector, think of the size of a World War II anti-aircraft searchlight or a lighthouse optic compared to the light source). This necessarily tight clustering of the LED chips increases temperatures due to the higher thermal density, at higher lumen packages the effect is worsened as the currents and therefore the temperatures are higher.

It is assumed by SLL that for directional light sources the proposed limits apply to “useful luminous flux” as per the present regulation, product information sheet and calculation of energy label class etc. This must be clarified in the regulation as it is fundamental for applying the correct limits.

In all cases where reference is made to luminous flux e.g. in the proposed “luminous efficacy”, “DDL” & “DNDL” definitions etc it needs to be clear this is “useful luminous flux”.

NOTE: SLL are proposing to delete the definitions that include the wording “domestic”.

Response to consultation questions on connected light sources

Question 17. *Do you agree with the proposed approach for connected light sources? Please provide reasons for your answer, supported by evidence where possible.*

Answer: SLL would propose to increase this allowance to 20 lm/W to include the present allowance for colour tuneable light sources and better support the growing trend to smart lighting which ultimately saves energy through better control.

However, it should also be noted that not all dimmable lamps are connected. Lamps that are dimmable by a wall dimmer but are not a “connected light source” also need an allowance. SLL propose 5 lm/W.

LEDs have a much more linear dimming curve between light output and energy consumption compared to incandescent light sources – thus by giving a dimming allowance, and thus promoting, not penalising, dimming is an energy saving policy measure.

Response to consultation questions on light sources with colour rendering index (CRI) greater than or equal to 93

Question 18. *Do you agree with the proposed approach for light sources with CRI greater than or equal to 93? Please provide reasons for your answer, supported by evidence where possible.*

Answer: No. The SLL proposes 2 steps: an allowance of 30 lm/W for light sources/modules with a CRI ≥ 95 & an allowance of 20 lm/W for light sources/modules with a CRI $\geq 90 < 95$.

We believe that the problem has been misunderstood by DESNZ. MEPS covers both modules and light sources (lamps), and as currently drafted, modules have no allowances at either Tier 1 or Tier 2. The market for directional light sources over CRI 95 is not large, but products using small diameter modules to deliver narrow beam light distributions is very important in galleries, hospitality, retail, high end residential and in the products manufactured and exported from the UK.

The carbon impact is low as these products are intrinsically more expensive and are thus not used for mass market applications.

Response to consultation questions on light sources with correlated colour temperature (CCT) [K] less than or equal to 2000k

Question 19. *Do you agree with the proposed approach for light sources with correlated colour temperature equal to or less than 2000k? Please give reasons for your answer, supported by evidence where possible.*

Answer: SLL do not agree and propose to introduce allowances for CCT ranges $\leq 3000\text{K}$ & $\leq 2500\text{K}$.

SLL proposes 5 lm/W for CCT $< 3000\text{K}$, 10 lm/W for CCT $\leq 2500\text{K}$.

Products with a CCT $< 2000\text{K}$ are of very limited use, being primarily decorative.

However the move of the whole market is from neutral white (CCT $> 3500\text{K}$) to warmer colours for three reasons:

- CCT $< 3000\text{K}$ light is not so disruptive to night time sleep patterns (hence devices and screens having night shift mode).
- CCT $< 3000\text{K}$ reduces the impact of light pollution due to its reduced blue content (blue light scatters).
- CCT $< 3000\text{K}$ reduces the impact on wildlife, especially bats and insects.

Efficacy is not the only function of a light source, it is essential to promote the increasing move to 3000K and warmer LED, failure to do so will have serious health, wellbeing, sky glow and wildlife consequences.

EPREL is an unreliable data source both in terms of the proven inaccuracy of the unchecked data entries, but also for the fact that it looks at SKUs not sales volumes – so a product selling just 10 units would have equally weighting to a product selling in the hundreds of thousands – it is thus not fit for DESNZ's purpose.

Response to consultation questions on light sources with lumen output less than or equal to 400 lumens

Question 20. *Do you agree with the proposed approach for light sources with lumen output equal to or less than 400lm? Please give reasons for your answer, supported by evidence where possible.*

Answer: SLL can accept the proposal for $\leq 400\text{lm}$ but would also propose an additional allowance of 20lm/W for very low lumen light sources $\leq 100\text{lm}$.

The present Ponmax curve allows for lower efficacy light sources at very low lumens, these light sources would be banned due to insufficient time for new products to be developed.

EPREL is an unreliable data source both in terms of the proven inaccuracy of the unchecked data entries, but also for the fact that it looks at SKUs not sales volumes – so a product selling just 10 units would have equally weighting to a product selling in the hundreds of thousands – therefore it is impossible for DESNZ to state impacts on the market in any accurate way.

Question 21. *Are there additional exemptions which the Government should consider, bearing in mind the criteria used for making an allowance which were outlined earlier in this document? Please give reasons for your answer, supported by evidence where possible.*

Answer: SLL propose to add an exemption for decorative lighting chains and rope lights with non-replaceable lights sources less than 60 lm per light source e.g. Christmas lighting chains. These products are of very low wattage and are used for decorative purposes for a few weeks of the year.

There is confusion in the market about whether the complete lighting chain should be treated as a "light source" or a "containing product" and how the current 60 lm limit should be applied (to the complete chain or each individual LED).

Adding a clear exemption would provide clarity to manufacturers and market surveillance authorities.

Response to consultation questions on exemptions

Question 22. *Do you agree with the proposal to remove the exemption for double-capped fluorescent T5 light sources with power $P \leq 13$ W from the ecodesign Regulations with effect from late 2023? Please provide reasons for your answer, supported by evidence where possible.*

Answer: SLL can accept this proposal.

Question 23. *Do you agree with the proposed amendments to the exemption for light sources for people with a photosensitivity condition? Please provide reasons for your answer, supported by evidence where possible.*

Answer: Yes. However, measures should be put in place to ensure that the sales and distribution of these incandescent technology products cannot introduce a loophole to the MEPS regulations.

Question 24. *Are there any reasons why the proposed amendments to this exemption would not be effective? (For example, any difficulties faced by pharmacies or other authorised selling points in sourcing suitable non-LED light sources from manufacturers/distributors.) Please provide reasons for your answer, supported by evidence where possible.*

Answer: No comment.

Question 25. *Are there other exemptions which you think should be removed or amended in order to further push the GB light source market towards the best performing LEDs? Please provide reasons for your answer, supported by evidence where possible.*

Answer: No comment.

Question 26. *Where exemptions remain, is there anything else government can do to help industries improve their lighting efficiency on a voluntary basis?*

Answer: No comment.

Response to consultation questions on review of the regulations

Question 27. *Do you agree with the proposed review date of December 2029? Please give reasons for your answer, supported by evidence where possible.*

Answer: No. The first review date should be 2025, i.e. two years after Tier 1 and two years before any Tier 2, this would allow for any technological improvements to be reviewed before the typical eighteen month to two year product development cycle.

By placing the review between Tiers 1 and 2, it allows for the mitigation of unintended consequences but also possible strengthening of MEPS if technology allows – which would further the industry’s and the government’s goal of reducing emitted carbon in line with a net zero policy.

END

Please do not hesitate to contact us for more information on this response. The Society of Light and Lighting would be willing to assist in the development of any of the issues raised in this response.