

RESPONSE TO A PROPOSAL FROM THE UNITED NATIONS ENVIRONMENT PROGRAMME FOR A LEGALLY-BINDING INSTRUMENT ON MERCURY

Introduction

Global Lighting Association

The Global Lighting Association (GLA) unites on a global level the leading national and regional industry associations for lighting technology. GLA promotes the use of sustainable, energy efficient lighting solutions, maintaining and improving the quality of lighting

Reflecting their individual regional circumstances, some GLA members will formulate their own response to the draft LBI. Notwithstanding these individual responses, all GLA members subscribe to this GLA response.

GLA supports in principle a Legally Binding Instrument (LBI) on Mercury

The GLA supports the adoption by UNEP of a Legally Binding Instrument on Mercury. The world's lighting industry is committed to reducing mercury in the environment and has been successful in considerably reducing the content of mercury in lamps in recent decades. The GLA is committed to further reducing mercury content where it is technologically and economically feasible to do so.

No effective substitute for mercury in most energy efficient lamps

There are no alternatives that are technologically and economically feasible for replacing mercury in lamps that currently rely on the substance for their operation. Mercury is essential for the efficient operation of these lamps. All other lighting technologies either struggle to match the energy efficiency of mercury-containing lamps, or fall well short. While solid state lighting holds considerable promise to eventually replace mercury-containing lamps, it will not do so in the foreseeable future. This is because the efficiency of solid state lighting, generally speaking, is not yet better than mercury-containing technology, but more importantly because of the high cost of solid state technology. Hence for many years to come the world will continue to rely on mercury-containing lamps for much of its energy efficient lighting.

Also for most special purpose lamps no alternatives to mercury are available. These include but are not limited to:

- disinfection and UV lamps,
- projector lamps,

- short arc mercury lamps,
- medical lamps,
- lamps for industrial production
- etc.

Harmonised thresholds

Harmonized, universally applied thresholds for mercury content in lamps are desirable, but impractical for all lamp types because of certain regional differences in control gear, electrical system infrastructure, lighting application and design, performance standards, and other product usage issues. GLA supports globally harmonized limits, where feasible, for high sales volume lamp types that are sold and used internationally. The LBI, however, should retain flexibility for UN Member States to establish sub-category limits for specialized lamps operated on ballasts and control gear found only in certain countries or regions. Without this accommodation of local needs, numerous essential lamp types would be unavailable in many markets.

Furthermore, a global LBI should not contain a schedule for an automatic phase-out of certain lamp types or automatic reductions in mercury content limits. Such decisions must be based on technical evaluations and international agreement to determine whether further reductions in mercury content can be attained without loss of performance and efficiency over the life of the lamp, when operated on local control gear and under differing application conditions.

GLA proposes the following regulatory approach:

- regulate only mainstream, general lighting products, which are globally available
- set a maximum mercury content limit for mainstream, globally available, low pressure discharge lamps
- allow parties to phase-in with a transitional approach
- categorise special lamps as essential-use products
- keep the regulation simple - easy to understand, amend and transpose into national legislation
- set stringent but achievable mercury limits sufficiently ambitious to achieve significant mercury reduction
- establish market surveillance measures to ensure that the regulations are effective

Response to options in draft LBI

As mercury is indispensable in energy efficient lighting and for special applications, restrictions in supply and trade of mercury or mercury added components/products is an inappropriate way to reduce the total mercury use in lighting. Instead, the GLA proposes globally harmonized lower limits for mercury containing lamps as a good alternative to reduce the total mercury use in Lighting. This is the basis for our remarks on the options below.

Article 6 Option 1

Option 1 is unsuitable as it makes the regulation of lamps too complex and runs the risk of banning some essential use lamps unintentionally. Option 1 proposes two lists for regulating mercury added products. In the first list - Annex C - it would list all products that are banned. In a second list – explained in Article 8 - it would give exemptions for certain Parties, under certain – so far unspecified – conditions, for certain products and uses. This is a convoluted approach and would require the maintenance of at least two lists which would be complicated and risk loss of transparency. It would also be necessary for the Parties to agree on conditions for requesting and granting exemptions. This option would increase the complexity and burden of administration compared to other options. The large variety of lamps in the world today, coupled with the complexity of the regulation, increases the risk that some essential use products would be banned unintentionally. Addressing such mistakes would be time consuming and cumbersome, as only a Conference of Parties could modify the regulation. Finally, because of regional exemptions, it would not be a globally harmonised regulation.

Article 6 Option 2

Option 2 is not suitable for lamps as it suffers from the same limitation as Option 1. The main difference is that Option 2 would ban all mercury-containing products, and Parties would be required to apply for exemptions. This “banning all, exempting some” approach is as complex as Option 1. It also requires the maintenance of an exemption list and agreement on conditions for exemptions. If Parties can sign-up for various exemptions the regulation loses immediately its strength of a harmonised approach for globally-traded lamps.

Article 6 option 3

Article 6 Option 3 is an improvement over Option 1 and 2 and provides an administratively simple regulation in the complex world of the global lamp market. It can be used to harmonize mercury levels for common high sales volume lamps types sold internationally. Accordingly GLA recommends adoption of Article 6 Option 3 for high international sales volume lamps, and recommends that these lamps be placed in paragraph 1(c): products for which non-mercury alternatives are unavailable or are available but not affordable globally.

Option 3 possesses the following advantages:

- As it includes both the negative and positive list approaches, Option 3 may be used for other mercury products which may require a different approach to lamps.
- It is possible to reduce the mercury content of mainstream general purpose lamps, thereby targeting 80% of the mercury in the lamp sector.
- With a common international mercury level for high sales volume lamps, the regulation can be made simple and market surveillance can be implemented effectively to facilitate the reduction of mercury in lighting.
- The list can be kept short and maintained easily.
- The message of the list is straightforward: a mercury level above a certain limit is unacceptable
- Harmonized limits are essential for effective implementation of market surveillance measures.

The best regulatory outcome would be to establish in Annex C Part II maximum mercury content limits for certain general purpose lamps which are globally available. All other lamps should be allowed to trade freely as essential-use products. Countries and regions should be allowed to establish additional limits or other measures for essential-use lamps.

Article 6 option 4

Option 4 provides a framework to address regionally distinct mercury-added lamp types. It would allow each region of the world to set the appropriate regulations based on the essential, but distinct, products used in their location. Moreover, this approach allows member states or regions to establish their own legislation to regulate the sale of regionally distinct mercury-added lamps. As several member states or regions are already using this approach, such as lamps sold in Europe to comply with the RoHS recast thresholds, it would fit well with existing international practice.

One drawback with Option 4 is that it lacks a common harmonized approach for high sales volume products sold internationally. If this option was used for high sales volume mercury-added lamps the regulation of mercury would not be internationally harmonised, as it would leave the choice of policy measures with the Parties.

Other issues arising from draft LBI

Article 6, Options 1 and 2, Paragraphs 1 and 2, Alternatives 1 and 2

Registration and written consent should not be required for the sale or recycling of mercury-added lamps. These products are currently shipped globally and needed by all countries for economic, safety, and security reasons. Recycling of mercury-added lamps has been growing rapidly over the past 15 years and is also becoming a common international activity.

Article 6, Option 1, Paragraph 3

New energy efficient, mercury-containing lamps are invented yearly with longer lifetimes, higher efficiency, and broader substitution for inefficient non mercury-containing products. GLA strongly recommends that the LBI avoid any provision that would discourage or ban the development of advanced energy efficient lamp types that provide widespread societal benefits.

Article 6, Option1, Paragraph 4

GLA opposes any provision in the LBI that would ban the export of equipment needed to produce mercury-added lamps. Lamp manufacturers must retain the ability to shift manufacturing equipment throughout the world as needed.

Paragraph 5, alternatives 1 and 2

Energy efficient lighting products are a global requirement. Although reporting requirements already exist for mercury-added lamps in some parts of the world, this does not contribute to mercury reduction. Therefore comprehensive reporting should not be introduced as a general global rule but be limited to products and processes where this is beneficial. It would certainly not be beneficial for lighting. Such reporting requirements would only increase costs for energy saving lighting products.

Article 8, Option 1 and Article 6, Options 1 or 2

Exemptions for mercury-containing lamps should not be allowed to expire automatically in 5 years or 10 years. Expiration should occur only in cases of international agreement that a specific exemption is no longer necessary. In such cases, the expiration should be accompanied by an appropriate notification period.

Market surveillance

To encourage all producers to abide by the regulations, the LBI should require governments to establish market surveillance schemes and report on the outcome.

Implications of implementing some options in draft LBI

It must be understood that implementation of some options in the draft LBI would prohibit the transport of lamps and lamp production technology. If this occurred it would deprive many economies of efficient, affordable lamps that contribute significantly to reducing CO₂ emissions. It would also make it impossible to introduce modern lamp production technologies, which ensure low mercury levels, to the great majority of the world's economies.