

LightingEurope  
encourages  
governments to:

- introduce harmonised mercury limits for lamps as enabling technology is widely available
- adopt the “Basic level” option (Minamata Convention) sooner than demanded
- consider adopting the “Advanced level” option by having higher environmental ambition

For more information  
please contact us  
and consult our position paper.  
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**LIGHTINGEUROPE**  
THE VOICE OF THE LIGHTING INDUSTRY

# Globally Harmonised Mercury Limits for Lighting

## Minamata Convention: “Basic level” option

The scope of the Minamata Convention covers the most popular lamps used in households, offices, electronic displays and for street lighting; setting maximum mercury content limits for several fluorescent lamp types. Specialty or niche market lamps are not further regulated. The limits on mercury reflect the feasible levels available world-wide for more than a decade.

### Mercury-added Light Sources\*

Lamps to be phased out which exceed the indicated mercury limits:

- 1** Compact fluorescent lamps (CFLs) for general lighting purposes that are  $\leq 30$  watts with a mercury content exceeding **5 mg** per lamp burner.
- 2** Linear fluorescent lamps (LFLs) for general lighting purposes:
  - (a) Tri-band phosphor  $< 60$  watts with a mercury content exceeding **5 mg** per lamp;
  - (b) Halophosphate phosphor  $\leq 40$  watts with a mercury content exceeding **10 mg** per lamp.
- 3** High pressure mercury vapour lamps (HPMV) for general lighting purposes.
- 4** Mercury in cold cathode fluorescent lamps and external electrode fluorescent lamps (CCFL and EEFL) for electronic displays:
  - (a) short length ( $\leq 500$  mm) with mercury content exceeding **3.5 mg** per lamp;
  - (b) medium length ( $> 500$  mm and  $\leq 1\,500$  mm) with mercury content exceeding **5 mg** per lamp;
  - (c) long length ( $> 1\,500$  mm) with mercury content exceeding **13 mg** per lamp.

\*The following products are excluded from the scope:

- (a) Products essential for civil protection and military uses;
- (b) Products for research, calibration of instrumentation, for use as reference standard;
- (c) Where no feasible mercury-free alternative for replacement is available, cold cathode fluorescent lamps and external electrode fluorescent lamps (CCFL and EEFL) for electronic displays, and measuring devices.

## LightingEurope proposal: “Advanced level” option

The “Advanced level” option includes more lamp types, and is setting lower mercury limits, compared to the “Basic level”. Its scope covers those lamp types which contain the majority of the total mercury amount used in lighting. It excludes, however, most of the specialty or niche market lamps. The limits reflect currently world-wide available precise mercury dosing technology. Governments can set specific exemptions or limits for regional products as justified by the local market requirements.

### Mercury-added Light Sources\*

Lamps to be phased out which exceed the indicated mercury limits:

- 1** Single capped compact fluorescent lamps (integrated and non-integrated control gear) for general lighting purposes:
  - (a) that are  $\leq 30$  watts with a mercury content exceeding **2.5 mg** per lamp;
  - (b) that are  $\leq 30$  watts with long lifetime ( $> 15$  hrs) with a mercury content exceeding **3.5 mg** per lamp;
  - (c) that are  $\geq 30$  Watt and  $< 150$  Watt with a mercury content exceeding **5 mg** per lamp;
  - (d) that are with circular or square structural shape or other non-linear with tube diameter  $\leq 17$  mm with a mercury content exceeding **7 mg** per lamp.
- 2** Double-capped linear fluorescent lamps  $\leq 1800$  mm for general lighting purposes:
  - (a) tri band phosphor with normal lifetime and a tube diameter  $< 9$  mm (e.g. T2) with a mercury content exceeding **4 mg** per lamp;
  - (b) tri band phosphor with normal lifetime and tube diameter  $\geq 9$  mm and  $\leq 17$  mm (e.g. T5) with a mercury content exceeding **3 mg** per lamp;
  - (c) tri band phosphor with normal lifetime with a tube diameter  $> 17$  mm and  $< 38$  mm (e.g. T8, T10) with a mercury content exceeding **3.5 mg** per lamp;
  - (d) tri band phosphor with long lifetime  $> 25$  hrs or tri band phosphor with a tube diameter  $\geq 38$  mm (e.g. T12) with a mercury content exceeding **5 mg** per lamp;
  - (e) halophosphate with a mercury content exceeding **10 mg** per lamp.
- 3** Other low pressure discharge lamps  $\leq 1800$  mm for general lighting not mentioned above and all low-pressure discharge lamps  $\leq 1800$  mm for special purpose with a mercury content exceeding **15 mg** per lamp.
- 4** High pressure mercury vapour lamps (HPMV) for general lighting purpose.
- 5** Mercury in cold cathode fluorescent lamps and external electrode fluorescent lamps (CCFL and EEFL) for electronic displays:
  - (a) short length ( $\leq 500$  mm) with mercury content exceeding **3.5 mg** per lamp;
  - (b) medium length ( $> 500$  mm and  $\leq 1\,500$  mm) with mercury content exceeding **5 mg** per lamp;
  - (c) long length ( $> 1\,500$  mm) with mercury content exceeding **13 mg** per lamp.

\*The following products are excluded from the scope:

- (a) Products essential for civil protection and military uses;
- (b) Products for research, calibration of instrumentation, for use as reference standard;
- (c) Where no feasible mercury-free alternative for replacement is available, cold cathode fluorescent lamps and external electrode fluorescent lamps (CCFL and EEFL) for electronic displays, and measuring devices;
- (d) Products for medical devices, monitoring and control instruments.