# Global Lighting Policy Update

Bulletin #1 - November 2022

This bulletin outlines recently passed national and regional policy developments around the world phasing out fluorescent lighting.

# 1. Global - Minamata Convention on Mercury

At the Minamata Convention on Mercury's Fourth Conference of Parties (COP4), 137 governments <u>adopted amendments</u> to phase out compact fluorescent lamps (CFLs) by the end of 2025. The governments also agreed to phase out cold cathode fluorescent lamps and external electrode fluorescent lamp (CCFL/EEFL) in 2025. The amendments are shown in the grey shaded rows in the table below:

MERCURY-CONTAINING PRODUCTS	PHASEOUT DATE1
Compact fluorescent lamps (CFLs) for general lighting purposes that are < 30 W with a mercury content > 5 mg per lamp burner	2020
Compact fluorescent lamps with an integrated ballast (CFL.i) for general lighting purposes that are 30 W with a mercury content ≤ 5 mg per lamp burner	2025
Linear fluorescent lamps (LFLs) for general lighting purposes: (a) Triband phosphor < 60 watts with a mercury content > 5 mg per lamp; (b) Halophosphate phosphor < 40 W with a mercury content > 10 mg per lamp	2020
High pressure mercury vapor lamps (HPMV) for general lighting purposes	2020
Mercury in cold cathode fluorescent lamps (CCFL) and external electrode fluorescent lamps (EEFL) for electronic displays: (a) short length (< 500 mm) with mercury content > 3.5 mg per lamp (b) medium length (> 500 mm and < 1500 mm) with mercury content > 5 mg per lamp (c) long length (> 1500 mm) with mercury content > 13 mg per lamp	2020
CCFLs and EEFLs of all lengths for electronic displays, not included in the listing directly above	2025

<sup>&</sup>lt;sup>1</sup> Date after which the manufacture, import or export of the product shall not be allowed

The <u>Clean Lighting Coalition</u> calculated the cumulative benefits (2025–2050) from phasing out CFL.i in 2025:

Mercury: 34.8 metric tonnes avoided

Financial: \$105.6 billion USD saved on energy bills<sup>2</sup>

Energy: 754 TWh saved

CO<sub>2</sub>: 263 million metric tonnes avoided

The cumulative benefits of CCFLs and EEFLs being phased out in 2025 is assumed to be zero because this technology has already been eclipsed by LED alternatives.

At COP4, the Parties decided to discuss LFLs at Minamata COP5 (30 October–3 November 2023), when they will agree on a phaseout date. The table showing what is under consideration at COP5 is presented below:

MERCURY-CONTAINING PRODUCTS	PHASEOUT DATE3
LFLs for general lighting purposes:	[2025] [2027]
(a) Halophosphate phosphor ≤ 40 watts with a mercury content ≤	[2030]
10 mg per lamp	
(b) Halophosphate phosphor > 40 watts	
LFLs for general lighting purposes:	[2027] [2030]
(a) Triband phosphor < 60 watts with a mercury content ≤ 5	
mg/lamp	

## 2. United States / North America

**California**: The U.S. state of California adopted AB 2208, a law that bans the sale of all LFLs and all non-integrally ballasted CFLs starting 1 January 2025. This law was influenced by research that supported a fluorescent lamp phaseout due to their mercury content. AB 2208 establishes a sales ban on all CFL.i starting on 1 January 2024. The California law is actively being referenced by other states.

**Vermont**: The U.S. state of Vermont adopted two laws which address some of the same products covered in the California legislation. The clause 10 V.S.A. §7152(A)(6) phases out all screw-based CFLs, effective 17 February 2023. Vermont also adopted H.500 which bans all four-foot LFLs (all diameters) effective 1 January 2024.

**Rhode Island**: The U.S. state of Rhode Island drafted a bill modelled after the California bill to phase out all CFLs and LFLs. <u>This draft bill</u> was introduced into the state legislature in March 2022. It did not complete the legislative process before the end of that term, but they are considering introducing it again in early 2023. CLASP will provide updates accordingly.

<sup>&</sup>lt;sup>2</sup> Assumes US\$0.14/kWh as a global average electricity price (March 2022) Global Petrol Prices.

**Canada**: Canada is considering a phaseout of lamps with mercury (CFLs and LFLs) after a public consultation on their <u>proposal</u>. CLASP was informed by the Canadian Ministry of the Environment and Natural Resources that they expect to publish their updated draft regulation for comment before the end of 2022.

## 3. Europe

**European Union (EU-27)**: In December 2019, the EU adopted <u>EU No. 2019/2020</u> which covers all lamps and luminaires placed on the market. On 1 September 2021, the first requirements of that regulation took effect, phasing out CFL.i and T12 LFLs. The second phase, which will take effect on 1 September 2023, will phase out T8 Fluorescent lamps of 600 mm, 1000 mm & 1500 mm length.

In December 2021, the <u>European Commission made a decision</u> under the Restriction of Hazardous Substances (RoHS) Directive to ban the sales of nearly all <u>LFLs</u> and <u>CFLs</u> in 2023. Under this regulation, only T9 circular and certain U-bend fluorescent lamps received an extension.

**European Economic Area (EEA)**: Iceland, Liechtenstein, and Norway, while not part of the European single market, are members of the European Economic Area and as such are required to conform to European regulations to maintain favourable trade status. These countries have therefore harmonised with EU No. 2019/2020 and the 2021 Amendments to the RoHS Directive (example: Norway RoHS regulation).

**United Kingdom (UK)**: The UK recently left the European Union, but not before it adopted EU No. 2019/2020 – (UK S.I. 2021 No. 1095). Thus, CFL.i and T12 LFLs were phased out in the UK in 2021 and certain T8 LFLs will be phased out in 2023. The UK also proposed to adopt more ambitious lighting regulations (BEIS Policy Paper, November 2021), setting efficacy levels that would phase out all fluorescent lighting (120 lumens/Watt). In addition to this policy development, the UK's Department for Environment, Food and Rural Affairs (DEFRA) is <u>currently considering harmonising</u> with the European Commission's amendments to the RoHS Directive.

#### 4. Africa

**Southern Africa Development Community (SADC)**: In June 2021, the sixteen (16) countries<sup>3</sup> of SADC adopted regionally harmonised quality and performance standard <u>SADCSTAN HT-109</u>. This standard sets a technology-neutral efficacy requirement that phases out fluorescent lamps and transitions to LEDs.

East African Community (EAC): In July 2022, the seven (7) countries<sup>4</sup> adopted a regionally harmonised quality and performance standard, EAS 1064-1:2022. The

<sup>&</sup>lt;sup>3</sup> The sixteen countries of the Southern African Development Community: Angola, Botswana, Comoros, Democratic Republic of Congo, Eswatini, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, United Republic Tanzania, Zambia and Zimbabwe.

<sup>&</sup>lt;sup>4</sup> The seven countries of East African Community: Burundi, Democratic Republic of Congo, Kenya, South Sudan, Tanzania, Rwanda and Uganda.

standard covers energy efficiency and functional performance requirements, sampling, and test methods for general service and tubular lamps. The requirements of the East African standard are aligned with the Southern African standard and will phase out fluorescent lamps in favour of LEDs.

**Sudan** – Sudan developed an energy efficiency strategy that includes adopting UNEP United for Efficiency (U4E) lighting regulations that phase out CFLs in 2024 and LFLs in 2025. See page 96 of Sudan's Energy Efficiency Strategy (February 2022).

## 5. Middle East

**Tunisia** – The National Agency for Energy Management of Tunisia is drafting lighting MEPS that will phase out all fluorescent lighting technologies by setting efficacy levels that only LED technology can achieve. See the <u>UNEP press release</u> on the 2022 workshop where the government and stakeholders met to agree the way forward.

## 6. Asia-Pacific

**India** - Last year at the Minamata Convention, India committed to the phaseout of CFLs by 2025 and fluorescent tube lights by 2027 to protect human health and the environment from the adverse effects of mercury.

**Pakistan** – In February, the Pakistan Ministry of Science & Technology announced a law that would prohibit the manufacture, sale & import of incandescent lamps & compact fluorescent lamps with effect from July 1 this year.

#### 7. Latin America and the Caribbean

**Dominican Republic** – the Deputy Minister of Energy called for greater use of energy-efficient lighting and highlighted the problem of mercury toxicity from fluorescent tubes. News item is <u>published here</u>.

**Chile** – the Ministry of Energy <u>published a resolution</u> in 2020 that will phase out CFLs by 2024 by setting mandatory efficacy requirements at a level only LED technology can achieve. In the resolution, the Ministry recognized that "a general change is required in conventional technologies from incandescent, halogen and fluorescent lighting to light-emitting diodes (LEDs)."