

## **Questionnaire Exemption Request No. 8**

### **“Mercury in cold cathode fluorescent lamps for general lighting purposes (Category 5)”**

#### **Background**

The Öko-Institut together with Fraunhofer IZM has been appointed within a framework contract for the evaluation of applications for granting, renewing or revoking an exemption to be included in or deleted from Annexes III and IV of the new RoHS Directive 2011/65/EU (RoHS 2) by the European Commission.

The Federazione with one of its federated associations - Associazione Nazionale Produttori Illuminazione (ANIE) applies to add to the Annex III following new exemption “Mercury in cold cathode fluorescent lamps for general lighting purposes, 1,0 mg mercury per 100 mm”.

The applicant puts forward the following main arguments.

- a. Cold Cathode Fluorescent Lamps (CCFL) **for general lighting purposes** cannot be considered totally excluded from the RoHS Directive scope because many of them are designed to operate with a voltage rating not exceeding 1000 V (a.c.) and also when they are exceeding such limit, the final appliance in which they have to operate will be supplied by 230 V a.c., so the limitation for hazardous substances would be applied to the whole luminaire. The existing exemption in Annex III, 2(b)(4) may be applied but it does not cover fully the needs for such lighting solutions.
- b. According to the applicant, when the whole system is considered from a Life Cycle Analysis approach, these kind of lamps can contribute to optimize the energy balance in lighting systems due to their high lumen output, long life and robustness without requiring additional mercury to function in comparison with the traditional lighting sources (in some cases even less).

For details, please check the applicant’s exemption request at <http://rohs.exemptions.oeko.info/index.php?id=138>. This exemption request has been subject to a first completeness and plausibility check. The applicant has been requested to answer additional questions and to provide additional information (c.f. link above).

The objective of this consultation and the review process is to collect and to evaluate information and evidence according to the criteria listed in Art. 5 (1) (a) of Directive 2011/65/EU (RoHS II), which you can download from here:

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32011L0065:EN:NOT>.

If you would like to contribute to the stakeholder consultation, please answer the following questions:

### Questions

1. The applicant claims that CCFLs are used **for general lighting purposes**. Do you agree with the scope of the exemption as proposed by the applicant? Please suggest an alternative wording and explain your proposal, if you do not agree with the proposed exemption wording.
2. Furthermore, the applicant suggests 1mg mercury per 100mm length in CCFLs **for general lighting purposes**. Please state whether you either support the applicant's request or whether you would like to provide argumentation against the applicant's request. In both cases please provide detailed technical argumentation / evidence to support your statement. What could be the pro and cons between a mercury limit per 100 mm length and a maximum mercury content for these lamps.
3. What is the influence of the application production technology on the amount of mercury needed for the lamp? How does the amount of mercury used in lamp production compare with the amount of mercury in the final product (lamp).
4. Please describe the different technical and performance characteristic<sup>1</sup> between the lamps according to the existing exemptions 2(b)(4), 3(a), 3(b) and especially for 3(c) of Annex III and the **lamps for general lighting purposes**.
5. Please provide test results/protocols that clearly indicate that CCFLs containing mercury deliver significant technical advantages over LEDs.
6. Could you please elaborate more in detail the efforts which have been made to reduce mercury and/or respectively to manage the performance with the existing exemptions in CCFLs for **the general lighting purposes** during the last three years?

Finally, please do not forget to provide **your contact details** (Name, Organisation, e-mail and phone number) so that Öko-Institut/Fraunhofer IZM can contact you in case there are questions concerning your contribution.

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<sup>1</sup> In terms of ratio of light output versus energy absorption, colour spectrum, aesthetics and longevity.