

---

**Study to assess three exemption requests:  
exemption 1(g) (Annex III) for mercury in  
single capped compact fluorescent lamps  
for general lighting purposes and two new  
exemptions (lead in soldering of certain  
printed circuit board assembly in gas  
detectors and lead in solder used to make  
electrical connections to vacuum boards  
used in Mass Spectrometers Boards  
designed to be used periodically under low  
pressure) in Annex IV to Directive  
2011/65/EU**

Project Description Pack 13 – 2017

**Oeko-Institut e.V. - Institute for Applied Ecology,  
Germany** (Project Management, Lead Partner)

Carl-Otto Gensch

Yifaat Baron

Katja Moch

**Fraunhofer Institute for Reliability and  
Microintegration IZM** (Partner)

Dr. Otmar Deubzer

**Oeko-Institut e.V.  
Freiburg Head Office**

P.O. Box 17 71  
79017 Freiburg, Germany

**Street Address**  
Merzhauser Str. 173  
79100 Freiburg

**Phone** +49 (0) 761 – 4 52 95-0  
**Fax** +49 (0) 761 – 4 52 95-288

**Darmstadt Office**

Rheinstr. 95  
64295 Darmstadt, Germany  
**Phone** +49 (0) 6151 – 81 91-0  
**Fax** +49 (0) 6151 – 81 91-133

**Berlin Office**

Schicklerstr. 5-7  
10179 Berlin, Germany  
**Phone** +49 (0) 30 – 40 50 85-0  
**Fax** +49 (0) 30 – 40 50 85-388

## Table of contents

<b>1</b>	<b>Background</b>	<b>1</b>
<b>2</b>	<b>Objectives</b>	<b>1</b>
<b>3</b>	<b>Scope</b>	<b>2</b>
<b>4</b>	<b>Project set-up</b>	<b>2</b>
<b>5</b>	<b>Time schedule</b>	<b>2</b>

---

## 1 Background

The RoHS Directive (2002/95/EC) (RoHS 1) has been recasted and has now become Directive 2011/65/EU that entered into force on 21 July 2011, repealing Directive 2002/95/EC on 3 January 2013. The RoHS Directive (2011/65/EU) on the restriction of the use of certain hazardous substances in electrical and electronic equipment requires “that EEE placed on the market, including cables and spare parts for its repair, its reuse, updating of its functionalities or upgrading of its capacity, does not contain the substances listed in Annex II” (i.e. lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls and polybrominated diphenyl ethers and the phthalates dibutyl phthalate (DBP), bis(2-ethylhexyl)phthalate (DEHP), diethyl phthalate (DEP) and diisobutyl phthalate (DIBP). These provisions “shall not apply to the applications listed in Annexes III and IV” (Article 4). These Annexes are to be adapted to scientific and technical progress on the basis of the provisions listed in Article 5.

With contract No. 07.0201/2015/SFRA/723205/ENV.A.2 implementing Framework Contract No. ENV.A.2/FRA/2015/0008, a consortium led by Oeko-Institut for Applied Ecology, has been requested by DG Environment of the European Commission to provide technical and scientific support for the evaluation of exemption requests under the RoHS 2 regime. The work is being undertaken by the Oeko-Institut and Fraunhofer IZM. The work has been requested in view of providing technical and scientific support 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).

## 2 Objectives

The objectives of this project can be outlined as follows:

- Provide a dedicated website which ensures that involved stakeholders will receive all necessary information and can contribute to online consultations (<http://rohs.exemptions.oeko.info>);
- Execute a clear technical and scientific assessment on whether requests for new exemptions are justified in line with the criteria given in Article 5(1)(a);
- Provide for the involvement and consultation of stakeholders (inter alia producers of electrical and electronic materials, components and equipment, recyclers, treatment operators, environmental organisations, employee and consumer associations), according to Article 5(7);
- Provide a clear and unambiguous wording for the preparation of a Draft Commission Decision for those exemptions, where on the basis of the result of the consultation and the evaluation, an exemption can be justified.

### 3 Scope

In agreement with the Commission, three exemption requests will be evaluated. Table 1 gives an overview on the requests, covering the use of mercury and lead.

Table 1 Exemption requests that will be evaluated during this project in order of date of submission.

No.	Proposed Wording	Date of Submission	Applicant
2017-1	Lead in solder used to make electrical connections to vacuum boards used in Mass Spectrometers. Boards designed to be used periodically under low pressure. 5 years	February 2017	SCIEX
2017- 2	Use of lead in welds for soldering of certain printed circuit board assemblies in gas detectors	January 2016	Oldham S.A.S.
Annex III, 1(g)	Mercury in single – capped (compact) fluorescent lamps for general lighting purposes < 30 W with a lifetime equal or above 20 000 h: 3,5 mg 5 years (Max)	June 2016	LightingEurope

### 4 Project set-up

The overall project is led by Carl-Otto Gensch. At Fraunhofer IZM the contact person is Otmar Deubzer. The project team at Oeko-Institut consists of the technical experts Yifaat Baron and Katja Moch.

The exemption evaluation will be performed in close co-operation with the European Commission and stakeholders (electrical and electronic industry and its associations, NGOs, independent experts etc.). This includes:

- Central communication access for stakeholders via the project-specific e-mail account [rohs.exemptions@oeko.de](mailto:rohs.exemptions@oeko.de);
- Project-specific website at <http://rohs.exemptions.oeko.info/> where relevant documents and project activities will be published;
- Information for stakeholders via website and via mailing lists for which stakeholders can register;
- Preparation and management of stakeholder consultations on new exemption requests via project website;
- Technical and scientific evaluation of stakeholder input and further procedure for receiving a sound basis with a high level quality of data and information and for cross-checking information for technical correctness and confidentiality issues;
- Stakeholder workshop or meetings where necessary.

### 5 Time schedule

Assignment of project tasks to Oeko-Institut and Fraunhofer IZM started 30 June 2017 and will run over a period of 9 months, thus ending 30 March 2018. An interim report shall be delivered to the European Commission during September 2017. The final report is due at the end of the project.

---

The stakeholder consultation is planned towards mid-September 2017. If a stakeholder workshop is appropriate it will take place in winter 2017/2018.