
**Review in the light of scientific and technical
progress of exemptions 8(e), 8(f)(b), 8(g) and
14 and re-evaluation of entry 8(j) of Annex II
to Directive 2000/53/EC (ELV).**

Project Description Pack 3 – 2018

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1 Background

EU Directive 2000/53/EC¹ on end-of-life-vehicles ("ELV" Directive hereafter referred to as "the Directive") bans the use of certain substances in vehicles. The Directive is updated according to scientific and technical progress. To date, Annex II to the Directive has been adapted eight times (in 2002, 2005, 2008, 2010, 2011, 2013, 2016 and 2017).

Any adaptation of the Annex needs to follow the requirements of the Directive. In particular:

- § Article 4(2)(a) of the Directive provides that "Member States shall ensure that materials and components of vehicles put on the market after 1 July 2003 do not contain lead, mercury, cadmium or hexavalent chromium other than in cases listed in Annex II under the conditions specified therein."
- § Annex II to the Directive lists a limited number of components and materials of vehicles which are exempted from the requirements of Article 4(2) (a) and may contain specific amounts of lead, mercury, cadmium and hexavalent chromium. This Annex also specifies the scope and expiry date of some of the exemptions as well as an obligation to make materials and components containing heavy metals labelled or identified in order to remove them before shredding.
- § Article 4(2)(b) provides for a regular adaptation of Annex II to scientific and technical progress. It stipulates that "*in accordance with the procedure laid down in Article 11 the Commission shall on a regular basis, according to technical and scientific progress, amend Annex II, in order to:*
 - (i) *as necessary, establish maximum concentration values up to which the existence of the substances referred to in subparagraph (a) in specific materials and components of vehicles shall be tolerated;*
 - (ii) *exempt certain materials and components of vehicles from the provisions of subparagraph (a) if the use of these substances is unavoidable;*
 - (iii) *delete materials and components of vehicles from Annex II if the use of these substances is avoidable;*
 - (iv) *under points (i) and (ii) designate those materials and components of vehicles that can be stripped before further treatment; they shall be labelled or made identifiable by other appropriate means."*
- § On the basis of Article 4(2)(b)(ii) of the Directive, the Commission needs to be review the existing exemptions from time to time in order to assess whether they are still justified according to technical and scientific progress and, in particular, whether the use of heavy metals in the requested cases is indeed unavoidable. Where the requirements of Article 4(2)(b)(ii) are fulfilled, the Commission can propose a draft decision amending Annex II to Directive 2000/53/EC.

¹ OJ L 269, 21.10.2000, p. 34.

- § The key criterion to be taken into account while revising Annex II to the Directive is the scientific and technical possibility of using substitutes of the restricted substances in vehicles, anywhere in the world.

With the new contract No. 07.0201/2018/779432/ENV.B.3 implementing Framework Contract No. ENV.A.2/FRA/2015/0008, a consortium led by Oeko-Institut has been requested by DG Environment of the European Commission to provide technical and scientific support for the evaluation of the renewal of exemptions 8(e), 8(f)(b), 8(g) and 14 and the re-evaluation of entry 8(j), listed in Annex II of the ELV Directive. The work is being undertaken by the Oeko-Institut and by Fraunhofer IZM and shall be peer reviewed by both organisations. 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 Annex II the ELV Directive 2000/53/EC.

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://elv.exemptions.oeko.info>);
- § Execute a clear technical and scientific assessment on whether the exemptions are justified in line with the criteria given in Article 4(2)(b);
- § Provide for the involvement and consultation of stakeholders (inter alia producers of vehicles, components and equipment installed in vehicles, recyclers, treatment operators, environmental organisations, employee and consumer associations);
- § 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, the renewal of five exemptions will be evaluated. Table 1 gives an overview on these, covering the use of lead and hexavalent chromium in various applications.

Table 1 Exemptions that will be evaluated during this project.

No.	Current Wording
8(e)	Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)
8(f)(b)	Lead in compliant pin connector systems other than the mating area of vehicle harness connectors
8(g)	Lead in solders to complete a viable electrical connection between semiconductor die and carrier

	within integrated circuit flip chip packages
8(j)	Lead in solders for soldering of laminated glazing
14	Hexavalent chromium as an anti-corrosion agent of the carbon steel cooling system in absorption refrigerators in motor caravans up to 0,75 weight — % in the cooling solution except where the use of other cooling technologies is practicable (i.e. available on the market for the application in motor caravans) and does not lead to negative environmental, health and/or consumer safety impacts

4 Project set-up

The overall project is led by Carl-Otto Gensch. The project team at Oeko-Institut consists of the technical experts Yifaat Baron and Katja Moch. At Fraunhofer, Otmar Deubzer shall carry out the relevant assignments.

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

- § Central communication access for stakeholders via the project-specific e-mail account elv@oeko.de;
- § Project-specific website at <http://elv.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 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 started on 18 April 2018 and will run over a period of 10 months, thus ending in February 2019. An interim report is to be delivered to the European Commission after two months for Ex. 8(j) and after four months for all other exemptions to be evaluated. A final report for Ex. 8(j) is due at the end of the fourth month and a final report for all other exemptions to be evaluated is due at the end of the project.

The stakeholder consultation will start in May 2018 and is planned for four weeks. If a stakeholder workshop is appropriate it will take place in summer or fall 2018.