



FEAD position Draft Eco-design Regulation on Electronic Displays 1 June 2017

FEAD, representing the private waste and resource management industry in Europe, welcomes the announcement by the European Commission of introducing resource efficiency criteria in selected eco-design regulations, aimed at increasing durability, reusability and recyclability of specific electronic products¹. The draft eco-design regulation on electronic displays is an important first step towards such product specifications that producers of electronic goods would have to meet to obtain access to the EU internal market.

The proposed resource efficiency requirements in Annex III of the draft regulation (version of 21 Dec. 2017)² are only partially helpful to increase future recyclability of electronic displays. Recycling activities would benefit from additional requirements on plastic and composite materials, as explained in section 3 below, alongside the criteria on dismantling included in Annex III which help improve resource efficiency via the repair sector. Moreover, Annex III will be difficult to achieve given the economic difficulties in the WEEE recycling sector.

The latest technological developments in electronic display manufacturing will make removal of hazardous substances redundant in the future. However, electronic displays made in the past and currently being disposed of often require the removal of hazardous components. They will continue to be disposed of and treated over the course of about twenty years. Increasing their recycling rates can only be achieved by a better implementation of the WEEE directive. Currently, according to EU estimates, only 16% of waste electrical and electronic equipment are disposed of via official take-back channels and treated according to the EU regulations.

Below are the key concerns of the private waste and resource management industry regarding the proposed draft eco-design regulation on electronic displays.

1. Scope

The draft regulation excludes electronic displays smaller than 1 dm² from the scope of the regulation. The exclusion is comprehensible and, from a resource efficiency point of view, it is acceptable.

Annex III criteria should apply to electronic displays (bigger than 1 dm²) even if they are part of electronic appliances (e.g. fridges). These displays fall within the scope of the WEEE directive. Hence, just as other displays, they are subject to treatment requirements.

A clarification that this regulation should not apply to mobile phones or smartphones could be useful. A specific regulation should be introduced for these electronic goods, as announced in the "Eco-design Working Plan 2016-2019".

¹ See Communication of the European Commission „Eco-design Working Plan 2016-2019“, 30 Nov. 2016

² https://ec.europa.eu/info/law/better-regulation/initiatives/ares-2016-7108187_en

2. Dismantability

Electronic displays containing mercury demand careful removal of the components where the mercury is located. This usually requires manual or mechanically supported disassembly. The separated components are subsequently processed using mechanical, pyro metallurgic or thermal treatments methods, depending on their physical properties.

Dismantling different components was made mandatory by the WEEE directive in order to remove hazardous substances. The removal of hazardous substances is necessary for electronic displays using cold-cathode fluorescent lamps (CCFLs) as background lighting as these may contain mercury. Electronic displays currently sold in the EU use light-emitting diodes (LEDs). The removal of hazardous substances is not necessary in this case.

3. Marking of plastic parts

Many types of plastics are technically very difficult to recycle. The purity of the grades determines the value and potential application of the plastics pellets. The large number of plastic types and complex plastic compositions hampers the identification and separation of plastics. The use of composite materials in electronic products presents a particular challenge for plastics recycling and this will make the achievement of WEEE recycling targets very difficult.

Requirements for labeling large plastic parts with plastic type and flame retardants, if used, would simplify plastic recycling of electronic displays. In the case of blends, more details of the blend need to be included, for example the marking ABS+PET is not specific enough. Only in this way can ambitious recycling targets be met in the future. This requires, however, that a minimum purity for plastic types can be ensured, to allow for the preparation and placing on the market of recycled pellets.

4. Mercury and cadmium logos

Mercury is not so often present in electronic displays (LED backlighting) currently marketed in the EU. However, in case a **logo** “mercury” or “mercury-free” is used, it should be of a bigger size than currently done. At present it is hardly detectable by workers at a recycling plant.

5. Glass used in electronic displays

The draft Commission Regulation omits reference to glass used in electronic displays. In most displays recyclers detect high lead and/or barium content, which renders the glass unsuitable for recycling.

6. Liquid crystals used in electronic displays

The draft Commission Regulation omits reference to the liquid crystals used in electronic displays. Due to a lack of information, no recycling or recovery technique has yet been developed for these materials.

7. Information requirements

The information requirements for disposal, as foreseen in Annex IV Point 3, are helpful. In addition, producers should be obliged to provide statements about the recyclability of the parts used. Introducing an index of recyclability, as discussed during the consultation forum on 10 December 2014, could be a possible option. Such an index would provide a stimulus for product designers to avoid non-recyclable plastics and composite materials (see Annex III (item C) of the draft from 10 December 2014).

FEAD is the European federation representing the private waste and resource management industry across Europe. FEAD's members are national waste management associations covering 18 Member States, Norway and Serbia. Our companies play a key role in the transition to a circular economy by producing resources which can be re-injected in the economy and by supplying energy. They add value through innovative and cost-efficient collection, sorting, and recycling of secondary raw materials. In doing so, they play a key role in achieving the best economic and environmental outcomes.

FEAD members represent about 3,000 companies with activities in all forms of waste management. These companies employ over 320,000 people who operate around 2,400 recycling and sorting centres, 1,100 composting sites, 260 waste-to-energy plants and 900 controlled landfills. Our companies have an approximate 60% share in the household waste market and handle more than 75% of industrial and commercial waste in Europe. Their combined annual turnover is approximately € 75 billion.