

February 1, 2023

Hazardous Waste and Toxics Reduction Program, Washington Department of Ecology P.O. Box 47600 Olympia, WA 98504 -7696

Re: Japan 4EE Comments on Proposed Rule of Safer Products for Washington

JEITA (Japan Electronics & Information Technology Industries Association) CIAJ (Communications and Information Network Association of Japan) JBMIA (Japan Business Machine and Information System Industries Association) JEMA (The Japan Electrical Manufacturers' Association)

We, Japanese electric and electronic industrial associations (JEITA, CIAJ, JBMIA and JEMA) (hereinafter, Japan 4EE), thank the Washington Department of Ecology (hereinafter, Ecology) very much for providing the opportunity for public comments on Proposed Rule of Safer Products for Washington program.

We have been vigorously committed to improve energy efficiency and to comply with chemical regulations set by other countries, including Europe, the U.S. and China, etc.

We support the basic policy of "the Safer Products for Washington program" as electric and electronic equipment (hereinafter, EEE) industry, because it would protect the consumers' health and environment based on risk assessment by identifying and managing the priority chemicals and priority consumer products which may be main sources of exposure to such substances.

However, we would like to emphasize again that EEE operators will be extremely difficult comply with the regulation if all HFRs in class are regulated for all EEE enclosures, and conversely, it may cause adversely effect to the citizens of the State of Washington. Therefore, we would like to request you to revise the regulations to make it practicable, referring to the comments below.

We also would like to offer comments on regulating thermal paper which is used as a consumable item in some products but not in the EEE itself.

We would appreciate your consideration.

I. Regulation of Organohalogen flame retardants (HFR) in EEE enclosures

In response to the Preliminary draft rule published in August, 2022, Japan 4EE submitted you the following comments on August 31.

1) Limit the covered HFRs to those recognized as harmful in other countries

2) Limit the covered EEE enclosures to TVs, displays and stands, harmonizing with the EU LOT 5 and NY state laws.

3) Set appropriate thresholds (e.g., 0.1%)

4) Set the appropriate grace period (at least four years)

5) Set the enforcement date based on manufacturing date

6) Set exclusions for spare parts, repair and refurbishment parts, and research and development use.

7) When more than 1000 ppm of halogen is detected by elemental analysis, the assumption of that HFRS were intentionally added is an issue.

However, with the exception of 5) stated the above, the Proposed Rule barely reflects the above requests and still aims to regulate all HFRs in all EEE enclosures without proper risk assessment. Even with the current industry technologies, it is extremely difficult for operators to follow such laws and regulations, so the proposal is not realistic as a regulatory requirement.

In addition, since the manufacture and sale of EEE cannot normally be controlled exclusively for a specific state, the impact of the proposal will be extended to virtually all products destined for the United States. Although it is known that HFRs are widely used in parts and materials of EEE, most HFRs have not been found to be hazardous, and any information on HFRs has not been communicated through the supply chain, so that it is difficult to grasp the information of HFRs contained in EEE, and any discussion on alternative substances has not been started yet.. Therefore, we are concerned that the hasty implementation of this regulation will prevent EEE from being distributed to the State of Washington and, as a result, which will have a serious negative impact on the citizens of the State of Washington, the people in America and the economy.

Furthermore, as HFRs are essential chemicals used to prevent the spread of EEE and protect human lives in the event of a fire, implementation of hasty regulation of all HFRs would put the lives of citizens and citizens at risk, so that extremely careful consideration is required to ban HFRs. Although Ecology states that there are alternative flame retardants to HFRs, we understand that it simply means that an alternative candidate flame retardant is available. A long-term study is needed to confirm that a wide variety of EEE enclosures with different applications and environments can meet all requirements for EEE, including not only flame retardancy but also initial characteristics and reliability.

Based on the above issues, we would like to offer our comments.

In order to make the proposed rule appropriate in which consideration of both risks to people and the environment and economic benefits are reflected, we will add comments to the proposed rule after rerequesting items not reflected in the proposed rule published on DEC. 7, 2022 stated above in 1) to 7). Finally, we would like to propose you an amendment based on our request.

[Notes]

• In particular, as for 1) and 2), we requested you total 3 times for previous public comments because they are essential to making the rule appropriate. Therefore, we hope that Ecology will consider and reflect them to the rule this time.

•We would like to comment on the proposed ban on products intended for indoor use.

We request you to remove the provision of any information on products intended for outdoor use.

It is easy to deduce that the risk of exposure from products used outdoors in the first place is negligibly small without an exposure assessment. As mentioned above, many HFRs are not restricted because their hazards are unconfirmed, nor is information gathered through the broad supply chain. Therefore, despite the considerable effort involved in gathering information for reporting, it is unlikely to directly contribute to protecting consumer health and the environment from hazardous chemicals, which is the purpose of this regulation.

1) Limit the covered HFRs to those recognized as harmful in other countries:

In the first place, the evaluation that led Ecology to conclude in December 2021 that it is reasonable to regulate EEE enclosures collectively as a class for all HFRs, was not satisfactory. If HFRs are to be restricted on the basis of the results of the Ecology assessment, consistency with the regulations of the preceding country/region is desirable, and it is appropriate to limit HFRs to those recognized as harmful, regulated, or under consideration for regulation in other countries (For example, SCCP, TCEP, TDCPP).

- Short chain chlorinated paraffins (SCCP) 85535-84-8
- Tris(2-chloroethyl) phosphate (TCEP) 115-96-8
- Tris(1,3-dichloro-2-propyl) phosphate (TDCPP) 13674-87-8

Alternatively, limit the use to HFRs with the following hazard classes that may affect humans.

- Carcinogenic Carc. 1A, 1B
- ➢ Germline mutagenic Muta. 1A, 1B
- Reproductive toxicity Repr 1A, 1B

In limiting the HFRs, it is essential to specify the CAS RN of the target substances.

In the absence of a CAS RN designation, chemical management in a complex and long supply chain such as an EEE is not possible. Thereby at least provide an exhaustive list with a CAS RN specified when limiting HFRs.

2) Limit the covered EEE enclosures to TVs, displays and stands, harmonizing with the EU LOT 5 and NY state laws:

For the purposes of the rule, rather than all EEE enclosures being subject to regulation, each candidate product should first be limited after assessing the risk of exposure to humans and the environment. In the first place, the components that make up the EEE, including the enclosures, are designed so that the HFRs contained in the product during use are not released into the environment in order to maintain the required flame retardant function, and it is inconceivable that HFRs from the product to human and the environment will be exposed.

However, if Ecology believes that it is absolutely necessary to regulate a specific EEE enclosures, it is desirable that the rule is harmonized with the regulations of the preceding other country/region, and it is also appropriate to limit the covered EEE enclosures to TVs, consumer electronic display harmonizing with the New York law (Section 4630 B/A 5418 B¹) promulgated in January 2022 and the EU LOT5 (Revised eco-design regulation for TV/Display (EU 2019/2021²)).

Although the Proposed Rule would limit prohibited products from January 1, 2025 to "electronic displays", we request you to amend the definition of "electronic display" in 173-337-025 to the following, harmonizing with the New York law or the EU LOT5:

"product with a display screen and associated electronics that, as its primary function, displays visual information from wired or wireless sources and is available for purchase by individuals or households for personal use in a residential space. Electronic display shall not include: (a) any electronic display with a screen area smaller than or equal to one hundred square centimeters or fifteen and one-half square inches; (b) projectors; (c) virtual reality headsets; (d) all-in-one video conference systems; or (e) displays that are integrated with appliances and are not available for purchase as separate products by end-users.

In addition, although you have planned that the Proposed Rule also would prohibit products other than electronic displays from January 1, 2026, we strongly ask you to reconsider it.

Even if, based on an appropriate exposure risk assessment, it is concluded that some specific products other than electronic displays should also be banned in the future, an sufficient grace period should be provided, with careful communication with relevant stakeholders. Generally, EEE requires at least a fouryear grace period. Please refer to 4) stated below for the reasons.

We also request you that the definition of target products be reconsidered to avoid confusion. As stated in the Proposal Notice , we understand that EEE plastic device casings are covered. In the proposed rule, the preferred consumer products are defined as "EEE with plastic external enclosure" and excluded products include cables, batteries and light bulbs. However, since some of these excluded products do not fit the definition of an EEE external enclosure, we are concerned that components not included in the definition of an "EEE external enclosure" but not listed in the excluded products could be construed as regulated.

To avoid such concerns, we suggest, for example, designating the preferred consumer product as an "EEE external enclosure" and removing excluded products, or providing a non-exhaustive list of examples, such as cables, batteries, and light bulbs. Alternatively, we would like to propose you the following changes to components/parts that are excluded (based on Section 173 -337 -112 (a) (iii)) in order to clearly determine whether each component used in a product is deemed an EEE external enclosure.

(iii) This subsection does not apply to the following parts of the priority consumer products described in(a) of this subsection.

¹ <u>https://www.governor.ny.gov/news/governor-hochul-signs-legislation-protect-new-yorkers-harmful-flame-retardant-chemicals</u>

² <u>https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32019R2021&from=EN</u>

- (A) Inaccessible electronic component <u>or parts</u>*, such as printed circuit boards and internal fans. <u>*Inaccessible parts may refer to the interior of plastic external enclosures that are not accessible</u> <u>during use of the product</u>.
- (B) Internal parts that <u>may be</u> are removable and replaceable, but not accessible once the product is in its fully assembled and functional form.

In addition, we would like to propose you a modification to the following definition of an external enclosure.

"External enclosures mean the plastic enclosure and stands of electronic displays."

3) Set appropriate thresholds (e.g., 0.1%)

Although the proposed rule limits the scope of regulation to intentionally added HFRs, we request you that an appropriate threshold (e.g., 0.1%) be established.

Limitations to intentional additions have led to the inclusion of HFRs as impurities, by-products, and recycled materials not being regulated, but the EEE industry needs to set appropriate thresholds to manage chemicals of concern across the supply chain.

It is reasonable to set the threshold at 0.1% by weight that is the same level set for brominated flame retardants PBB and PBDE by the EU RoHS Directive banning certain flame retardants in EEE. These two groups of substances are among the most hazardous of HFRs, but at this threshold they have been able to significantly reduce the risk without compromising consumer benefits. Additionally, in the case of setting the threshold at 0.1% by weight, we would like to highlight again that HFRs contained in recycled materials should be exempted from the restriction because such HFRs in recycled materials are not intentionally added by manufacturers of the products.

4) Set the appropriate grace period (4 years or more)

EEE consists of a large number of components and is manufactured in complex global supply chains around the world. Therefore, the control of controlled substances in products is not possible by EEE manufacturers alone, and the substances are controlled through communication within the supply chain. The method is internationally standardized, and a common list of controlled substances is used in industries. The EEE industry uses IEC 62474 "Material Declaration for products of and for the electrical industry" as a common standard.

Substitution of functional substances in EEE takes a long time. The EU RoHS Directive, for example, clearly identifies controlled substances, sets the threshold at 0.1%, and gives about four years to prepare for the designation of new controlled substances, even when suitable alternative substances are already available. In view of the smooth implementation of compliance of goods in the United States, we request you a grace period of at least four years for substitution of substances in consumer EEE.

For reference, the outline dates for the process our members will undertake to phase chemicals out of the supply chain are as follows:

The fastest time frame is stated for each step when the target substance and threshold are set appropriately; however, the entire process has barely been completed in the shortest time, therefore, at least a grace period of four years is necessary. Individual steps and time frames may vary from company to company.

- Procurement and evaluation of replacement parts with suppliers: at least six months, usually longer. If there is no suitable replacement, it stops at this step in the first place.
- •Internal quality assessment: a minimum of 3 months, usually longer.
- Quality and safety certification: a minimum of six months, usually longer.
- •Supplier adjustments and manufacturing changes: a minimum of 6 months, usually longer.
- Shipping, importing, and delivery in the US: a minimum of 3 months

5) Set the enforcement date based on manufacturing date

Our request has been reflected in the proposed rule. We appreciate it.

6) Set exclusions for spare parts, repair and refurbishment parts, and R & D uses

6-1) Exclusion of spare parts and repair and refurbishment parts for products manufactured before enforcement of the rule

We appreciate that the amendment excludes spare parts and refurbished parts manufactured before the effective date.

However, as the proposed rule is insufficient, spare and refurbished parts for use in products manufactured before the effective date should be excluded indefinitely.

EEE manufacturers have an obligation to supply spare parts and consumables to customers over time and must store them for certain period in warehouses as spare parts, parts and raw materials because manufacturing of some of the parts and raw materials that make up the spare parts and consumables may be discontinued.

In addition, the production of spare and refurbished parts for this EEE shall continue even after the enforcement of the EEE regulations in order to keep the covered EEE usable for as long as possible.

Therefore, spare and refurbished parts for use in EEE manufactured before the enforcement date of the regulations should be excluded indefinitely from the scope. The EU RoHS also allows this exemption, and it makes sense to do so in light of the global trend of efficient use of resources.

6-2) Exclusion of research and development products

Research and development activities in the United States are important for the people in the world to develop and introduce cutting-edge technologies and products, including fighting against COVID-19 and exploring alternative materials as substitutes for goods manufactured or imported for use in the United States.

Without the ability to conduct research and development of such products and articles in the United States, it is essentially impossible for industrial member companies to meet the advanced technical performance specifications of their products. Responsible chemicals management programs should be permitted and encouraged. Commercial manufacture/import/distribution of EEE external device enclosures including HFRs for research and development activities such as prototypes should be excluded. At a minimum, the following should be excluded:

(i)When a limited number of articles are used for research and development activities in the United States (e.g., 100 or fewer)

(ii) Products recovered after use in research and development activities and shipped outside the United States

7) When more than 1000 ppm of halogen is detected by elemental analysis, the assumption of that HFRs were intentionally added is an issue.

Elemental analysis can only confirm the presence of halogens, not uses of the halogens. Halogens from unintentional additions, such as recycled materials, impurities, and by-products, as well as halogens from blame-retardant agents, such as antioxidants and electricity-imparting materials, are often used in EEE. In actual elemental analysis, it is easy to expect that halogens will be frequently detected.

If the manufacturer is asked to rebut whenever halogen is detected, the manufacturer will incur a great burden in preparing documents for the rebuttal. It would also be a heavy burden for Ecology who would need to seek to disprove the evidence.

Therefore, this provision should be deleted, and after limiting the covered HFRs as described in 1) above, manufacturers should be given an opportunity to rebut after detecting restricted HFRs individually.

8) Clarification of unclear descriptions

8-1) Intended for Indoor/Outdoor Use

In the current draft, some EEEs can fall into both the Intended for Indoor and Outdoor Use categories, while Section 173 -337 -112 (2) (a) (ii) (A) indicates that the provisions for electronic products intended for outdoor use do not apply to products intended for indoor use. We propose you that the definition of "intended for outdoor use" be changed as follows to clarify which of these products falls under:

"Intended for Outdoor Use" means a product designed to maintain functionality solely for use after outdoor exposure to ultraviolet (UV) light, water, or immersion —when used outdoors for an extended time.

8-2) "Intentionally added chemical"

We would like to request you the exclusion of intentionally added chemicals that are added during the manufacture of the product in order to perform their intended function. Therefore, we propose you to change the definition as follows:

"Intentionally added chemical" means a chemical that serves an intended function in the final product or in the manufacturing of the product or part of the product.

9) Other

9-1) Set exclusions for enclosures weighting less than 25 g $\,$

The amendment excludes enclosures weighing less than 0.5 g, however, we request you that enclosures weighing less than 25 g be excluded in accordance with EPEAT Computers and Displays Category criteria based on 4.1.5.1 of IEEE Std 1680.1aTM-2020³.

9-2) Delete the setting of the enforcement date according to the enterprise classification. Although the proposed rule classifies companies into Group 1 and Group 2 according to their size and the

³ Standard can be downloaded from <u>https://www.epeat.net/about-epeat</u>

enforcement date changes according to this classification, this is meaningless.

It is understandable that this division was established to reduce the burden on small and medium-sized enterprises (SMEs), however it is inconceivable that the law-abiding period varies depending on the size of the enterprise, and many Group 1 companies use Group 2 products to manufacture their own products, and even if Group 2's enforcement schedule is pushed back, it will not reduce the burden on SMEs because Group 2 will also have to adhere to Group 1's schedule.

Therefore, in order to reduce the burden on SMEs, it is appropriate to align the enforcement date with Group 2.

9-3) Request for exemption

Currently, it is required to comply with the requirements of the rules until the DOE grants an exemption. In that case, all distribution, including downstream suppliers, would have to stop until the DoE grants it. To avoid such supply chain disruptions, we request you that the company be allowed to continue selling its products until the DOE makes a final decision on the exemption application.

9-4) Previously-owned priority consumer products

As for the exclusion of "previously owned products," we would like you to consider adopting the "exemption for products owned/sold prior to the effective date" as stated in TSCA.

Conclusion

In summarizing our requests stated above, it is appropriate to amend the legal text as follows, for example:

WAC 173-337-025 Acronyms and definitions. Unless ecology determines the context requires otherwise, the following definitions apply for the purposes of this chapter.

"Electronic display" means a display screen and associated electronics that, as its primary function, displays visual information from wired or wireless sources <u>and is available for purchase by individuals or</u> <u>households for personal use in a residential space.</u>

Electronic display shall not include: (a) any electronic display with a screen area smaller than or equal to one hundred square centimeters or fifteen and one-half square inches; (b) projectors; (c) virtual reality headsets; (d) all-in-one video conference systems; or (e) displays that are integrated with appliances and are not available for purchase as separate products by end-users.

"External enclosures" means the plastic external part of the product that renders inaccessible all or any parts of the equipment that may otherwise present a risk of electric shock or retards propagation of flame initiated by electrical disturbances occurring within the plastic enclosure and stands of electronic displays.

"Intended for Outdoor Use" means a product designed to maintain functionality solely for use after outdoor exposure to ultraviolet (UV) light, water, or immersion when used outdoors for an extended time.

"Intentionally added chemical" means a chemical that serves an intended function in the final product-or in the manufacturing of the product or part of the product."

WAC 173-337-112 Flame retardants.

(1) Electric and electronic products with plastic external enclosures, intended for indoor use.

(a) Applicability.

(i) Priority consumer products. This subsection applies to <u>enclosure of</u> electric and electronic products with plastic external enclosures, intended for indoor use that are powered by either of the following:

- (A) Standard 120 volt outlets and designed for up to 20 amp circuit;
- (B) Battery.
- (ii) This subsection does not apply to:
- (A) Electric and electronic products with plastic external enclosures, intended for outdoor use.

(B) Consumer products that receive power only when they are hardwired into and permanently part of the fixed electrical wiring of a building. This includes wiring devices, control devices, electrical distribution equipment, and lighting equipment.

(C) Products regulated by the FDA as medical devices.

(D) Products designed to use nonelectric heating energy sources, such as natural gas.

(iii) This subsection does not apply to the following parts of the priority consumer products described in

- (a) of this subsection.
- (A) Inaccessible electronic component <u>or parts</u>, such as printed circuit boards and internal fans. <u>*Inaccessible parts may refer to the interior of plastic external enclosures that are not accessible during use of the product</u>.

(B) Internal parts that <u>may be</u> are removable and replaceable, but not accessible once the product is in its fully assembled and functional form.

- (C) Plastic external enclosure parts that weigh less than 0.5-25 grams.
- (D) Screens. This subsection does apply to the plastic enclosure surrounding the screen.
- (E) Wires, cords, cables, switches, light bulbs, and connectors.
- (b) Compliance schedule.
- (i) Group definitions.
- (A) "Group 1" means a person or entity whose gross sales equal or exceed \$1,000,000,000 in 2022.-
- (B) "Group 2" means a person or entity whose gross sales are less than \$1,000,000,000 in 2022.
- (ii) Electronic displays and televisions compliance schedule.
- (A) The restriction in (c) of this subsection takes effect on January 1, 2025 [4 years after issuance of this rule], for persons or entities in Group 1 or Group 2 who manufacture, sell, or distribute:
 - Electronic displays described in (a) of this subsection;
 - Televisions described in (a) of this subsection.
- (B) This does not include the following priority consumer products:
 - All-in-one video conference systems;

• Displays that are integrated with appliances and are not available for purchase as separate products by end-users;

- Projectors;
- Virtual reality headsets.
- (iii) Group 1 compliance schedule.
- (A) The restriction in (c) of this subsection takes effect on January 1, 2026, for persons or entities in Group 1 who manufacture, sell, or distribute a priority consumer product described in (a) of this subsection.
 - This includes:
 - All in one video conference systems; -
 - Displays that are integrated with appliances and are not available for purchase as separate products by end-users; -
 - Projectors;
 - Virtual reality headsets.
- (B) This does not include the following priority consumer products described in (a) of this subsection:
 - Electronic displays described in (a) of this subsection;
 - Televisions described in (a) of this subsection.
- (iv) Group 2 compliance schedule.
- (A) The restriction in (c) of this subsection takes effect on January 1, 2027, for persons or entities in Group 2 who manufacture, sell, or distribute a priority consumer product described in (a) of this subsection.

This includes:

- All-in-one video conference systems;
- Displays that are integrated with appliances and are not available for purchase as separate products by end users;
- Projectors;
- Virtual reality headsets.
- (B) This does not include the following priority consumer products described in (a) of this subsection:
 - Electronic displays described in (a) of this subsection;
 - Televisions described in (a) of this subsection.
- (c) Restriction.

(i) No person may manufacture, sell, or distribute a priority consumer product described in (a) of this subsection that has a plastic external enclosure that contains intentionally added organohalogen flame retardants described in (d) of this section.

This does not apply to a:

(A) Priority consumer product described in (a) of this subsection manufactured before the applicable compliance schedules in (b) of this subsection;

(B) Repair part or replacement part <u>used for the products</u> manufactured before the applicable compliance schedules in (b) of this subsection;

(C) Priority consumer product refurbished with repair or replacement parts <u>for the products</u> manufactured before the applicable compliance schedules in (b) of this subsection.

(d) Organohalogen flame retardants covered in this section Short chain chlorinated paraffins (SCCP) 85535-84-8 Tris(2-chloroethyl) phosphate (TCEP) 115-96-8 Tris(1,3-dichloro-2-propyl) phosphate (TDCPP) 13674-87-8

(ii) Ecology presumes the detection of:

(A) Total bromine concentrations above 1,000 ppm indicate intentionally added organohalogen flame retardants.

(B) Total chlorine concentrations above 1,000 ppm indicate intentionally added organohalogen flame retardants.

(C) Total fluorine concentrations above 1,000 ppm with less than 5,000 ppm total phosphorus indicate intentionally added organohalogen flame retardants.

(iii) Manufacturers may rebut this presumption by submitting a statement to ecology that includes the following information:

(A) The name and address of the person submitting the statement;-

(B) A statement that an organohalogen flame retardant was not intentionally added. Provide credible evidence supporting that statement and include information, data, or sources relevant to demonstrate that an organohalogen flame retardant was not intentionally added.

(2) Electric and electronic products with plastic external enclosures, intended for outdoor use.

II. Regulation of Bisphenols in Thermosensitive Paper

In response to the Preliminary draft rule published in August, four Japanese electrical and electronics organizations submitted the following comments on August 31.

1) Set appropriate thresholds (e.g. 0.02%) and identification of controlled substances

2) Set an appropriate grace period (36 months or more)

3) Set the effective date based on the "date of manufacture"

As for the thresholds in 1) above and 3) above, which are reflected in the proposed rules, we would like you to consider the following proposals, which are essential to make the regulations realistic considering social interests.

1) Set appropriate thresholds and identification of controlled substances

We appreciate the proposed amendment setting the threshold at 0.02%, however, we request you to identify certain bisphenols to be restricted.

In order to implement regulations smoothly, it is desirable to align the regulations with those that precede them in other countries. Although there are no regulations for bisphenol as a class of thermal paper in

other countries, there are many regulations for thermal paper (or receipts) containing bisphenol A (or BPA). The European Union limits the concentration of BPA in thermal paper products to 0.02% by weight, and Switzerland limits alternative bisphenol S (or BPS) to a similar concentration.

Efficient management of substances in goods manufactured through the supply chain requires simplicity and clarity that can be understood by manufacturers in any part of the world. Since the types of bisphenols used in thermal paper are limited, it is desirable to clearly identify controlled substances with identifiers such as CAS RN.

2) Exclude FDA-regulated medical devices

We request you that medical devices regulated by the FDA be exempted from the regulation of bisphenols in thermal paper as well as from the regulation of OFR.

3) Set an appropriate grace period (36 months or more)

There was a 36-month grace period for BPA restrictions after the EU REACH regulation came into force. In view of the smooth implementation of compliance for goods in the EU, we would like to request you to set a grace period of at least 36 months.

Sincerely yours,

Jukasa Dimuna

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About Japanese electric and electronic (E & E) industrial associations:

About JEITA

The objective of the Japan Electronics and Information Technology Industries Association (JEITA) is to promote the healthy manufacturing, international trade and consumption of electronics products and components in order to contribute to the overall development of the electronics and information technology (IT) industries, and the very future Japan's economic development and cultural productivity.

About CIAJ

Mission of Communications and Information network Association of Japan (CIAJ). With the cooperation of member companies, CIAJ is committed to the healthy development of info-communication network industries through the promotion of info-communication technologies (ICT), and contributions to the realization of more enriched lives in Japan as well as the global community by supporting widesread and advanced uses of information in socio-economic and cultural activities.

About JBMIA

Japan Business Machine and Information System Industries Association (JBMIA) is the industry organization which aims to contribute the development of the Japanese economy and the improvement of the office environment through the comprehensive development of the Japanese business machine and information system industries and rationalization theory.

About JEMA

The Japan Electrical Manufacturers' Association (JEMA) The Japan Electrical Manufacturers' Association (JEMA) consists of major Japanese companies in the electrical industry including: power & industrial systems, home appliances and related industries. The products handled by JEMA cover a wide spectrum; from boilers and turbines for power generation to home electrical appliances. Membership of 291 companies, http://www.jema-net.or.jp/English/