

Public Consultation on the RoHS Evaluation

Fields marked with * are mandatory.

Introduction

The rise in the production and usage of electrical and electronic products, such as mobile phones, computers and kitchen appliances, has resulted in an increasing volume of electrical and electronic waste. During the collection, treatment and disposal of the waste, the products may release harmful (hazardous) substances such as lead, mercury and cadmium. These hazardous substances may even be released during the use of the product.

To address such challenges, EU legislation restricts the use of certain hazardous substances in electrical and electronic equipment (the RoHS Directive (2011/65/EU)). Currently, it restricts the use of ten substances: lead, cadmium, mercury, hexavalent chromium (chromium (VI)), polybrominated biphenyls (PBB) and polybrominated diphenyl ethers (PBDE), bis(2-ethylhexyl) phthalate (DEHP), butyl benzyl phthalate (BBP), dibutyl phthalate (DBP) and diisobutyl phthalate (DIBP). All products with an electrical and electronic component, unless specifically excluded, have to comply with these restrictions.

The legislation protects human health and the environment. It also contributes to the free movement of goods within the EU, encourages development of innovative products and technologies, and inspires non-European countries to pass similar laws.

The purpose of this consultation is to gather views of consumers, civil society and other organisations on how the restriction of hazardous substances in electronic products works in practice. The views will help the Commission in assessing what works well, what not and why.

About you

* Language of my contribution

- Bulgarian
- Croatian
- Czech
- Danish
- Dutch
- English
- Estonian
- Finnish
- French
- Gaelic
- German
- Greek
- Hungarian
- Italian

- Latvian
- Lithuanian
- Maltese
- Polish
- Portuguese
- Romanian
- Slovak
- Slovenian
- Spanish
- Swedish

* I am giving my contribution as

- Academic/research institution
- Business association
- Company/business organisation
- Consumer organisation
- EU citizen
- Environmental organisation
- Non-EU citizen
- Non-governmental organisation (NGO)
- Public authority
- Trade union
- Other

* First name

Stéphanie

* Surname

Mittelham

* Email (this won't be published)

stephanie.mittelham@orgalim.eu

* Organisation name

255 character(s) maximum

Orgalim, Europe's Technology Industries

* Organisation size

- Micro (1 to 9 employees)
- Small (10 to 49 employees)
- Medium (50 to 249 employees)
- Large (250 or more)

Please specify whether your annual turnover is

- ≤ 2 million euros
- ≤ 10 million euros
- ≤ 43 million euros
- > 43 million euros
- I prefer not to disclose this information

Please specify whether you are primarily involved as or represent:

- Raw material supplier
- Manufacturer of components to be integrated into finished electrical and electronic equipment
- Manufacturer of finished electrical and electronic equipment
- Distributor/ Importer
- Waste manager
- Other

Please specify which of the following RoHS categories of electrical and electronic equipment you deal with (maximum of three choices):

- Large household appliances such as refrigerators, microwaves, washing machines or air conditioner appliances
- Small household appliances such as vacuum cleaners, irons, electric knives or appliances for hair-cutting, hair drying or tooth brushing
- IT and telecommunications equipment such as printers, computers, telephones or other products or equipment transmitting sound, images or other information by telecommunications
- Consumer equipment such as radios, televisions, video cameras or audio amplifiers
- Lighting equipment such as straight fluorescent lamps, compact fluorescent lamps, high intensity discharge lamps or low pressure sodium lamps
- Electrical and electronic tools such as drills, saws, sewing machines or tools for mowing or other gardening activities
- Toys, leisure and sports equipment such as electric trains, hand-held video game consoles or sports equipment with electric or electronic components
- Medical devices such as radiotherapy equipment, dialysis, cardiology or laboratory equipment
- In vitro diagnostic medical devices
- Monitoring and control instruments such as smoke detectors, heating regulators or thermostats
- Industrial monitoring and control instruments such as control panels
- Automatic dispensers such as for hot drinks, solid products or money
- Other equipment not covered by any of the categories above

* If other, please specify:

Orgalim represents the manufacturers of electric and electronic equipment as covered by the scope of the RoHS Directive 2011/65/EU as a whole. Overall, Orgalim represents Europe's technology industries – innovative companies spanning the mechanical engineering, electrical engineering and electronics, and metal technology branches. Together they represent the EU's largest manufacturing sector, generating annual turnover of around €2,000 billion, manufacturing one-third of all European exports and providing 11 million direct jobs.

Transparency register number

255 character(s) maximum

Check if your organisation is on the [transparency register](#). It's a voluntary database for organisations seeking to influence EU decision-making.

Orgalim is registered under the European Union Transparency Register - ID number: 20210641335-88.

* Country of origin

Please add your country of origin, or that of your organisation.

- | | | | |
|---|---|--|--|
| <input type="radio"/> Afghanistan | <input type="radio"/> Djibouti | <input type="radio"/> Libya | <input type="radio"/> Saint Martin |
| <input type="radio"/> Åland Islands | <input type="radio"/> Dominica | <input type="radio"/> Liechtenstein | <input type="radio"/> Saint Pierre and Miquelon |
| <input type="radio"/> Albania | <input type="radio"/> Dominican Republic | <input type="radio"/> Lithuania | <input type="radio"/> Saint Vincent and the Grenadines |
| <input type="radio"/> Algeria | <input type="radio"/> Ecuador | <input type="radio"/> Luxembourg | <input type="radio"/> Samoa |
| <input type="radio"/> American Samoa | <input type="radio"/> Egypt | <input type="radio"/> Macau | <input type="radio"/> San Marino |
| <input type="radio"/> Andorra | <input type="radio"/> El Salvador | <input type="radio"/> Madagascar | <input type="radio"/> São Tomé and Príncipe |
| <input type="radio"/> Angola | <input type="radio"/> Equatorial Guinea | <input type="radio"/> Malawi | <input type="radio"/> Saudi Arabia |
| <input type="radio"/> Anguilla | <input type="radio"/> Eritrea | <input type="radio"/> Malaysia | <input type="radio"/> Senegal |
| <input type="radio"/> Antarctica | <input type="radio"/> Estonia | <input type="radio"/> Maldives | <input type="radio"/> Serbia |
| <input type="radio"/> Antigua and Barbuda | <input type="radio"/> Eswatini | <input type="radio"/> Mali | <input type="radio"/> Seychelles |
| <input type="radio"/> Argentina | <input type="radio"/> Ethiopia | <input type="radio"/> Malta | <input type="radio"/> Sierra Leone |
| <input type="radio"/> Armenia | <input type="radio"/> Falkland Islands | <input type="radio"/> Marshall Islands | <input type="radio"/> Singapore |
| <input type="radio"/> Aruba | <input type="radio"/> Faroe Islands | <input type="radio"/> Martinique | <input type="radio"/> Sint Maarten |
| <input type="radio"/> Australia | <input type="radio"/> Fiji | <input type="radio"/> Mauritania | <input type="radio"/> Slovakia |
| <input type="radio"/> Austria | <input type="radio"/> Finland | <input type="radio"/> Mauritius | <input type="radio"/> Slovenia |
| <input type="radio"/> Azerbaijan | <input type="radio"/> France | <input type="radio"/> Mayotte | <input type="radio"/> Solomon Islands |
| <input type="radio"/> Bahamas | <input type="radio"/> French Guiana | <input type="radio"/> Mexico | <input type="radio"/> Somalia |
| <input type="radio"/> Bahrain | <input type="radio"/> French Polynesia | <input type="radio"/> Micronesia | <input type="radio"/> South Africa |
| <input type="radio"/> Bangladesh | <input type="radio"/> French Southern and Antarctic Lands | <input type="radio"/> Moldova | <input type="radio"/> South Georgia and the South Sandwich Islands |

- Barbados
- Belarus
- Belgium
- Belize
- Benin
- Bermuda
- Bhutan

- Bolivia
- Bonaire Saint Eustatius and Saba
- Bosnia and Herzegovina
- Botswana
- Bouvet Island
- Brazil
- British Indian Ocean Territory
- British Virgin Islands
- Brunei
- Bulgaria

- Burkina Faso
- Burundi

- Cambodia

- Cameroon

- Canada
- Cape Verde
- Cayman Islands

- Central African Republic
- Chad
- Chile
- China

- Christmas Island
- Clipperton
- Cocos (Keeling) Islands
- Gabon
- Georgia
- Germany
- Ghana
- Gibraltar
- Greece
- Greenland

- Grenada
- Guadeloupe

- Guam

- Guatemala
- Guernsey
- Guinea
- Guinea-Bissau

- Guyana

- Haiti
- Heard Island and McDonald Islands
- Honduras
- Hong Kong

- Hungary

- Iceland

- India
- Indonesia
- Iran

- Iraq

- Ireland
- Isle of Man
- Israel

- Italy

- Jamaica
- Japan
- Monaco
- Mongolia
- Montenegro
- Montserrat
- Morocco
- Mozambique
- Myanmar /Burma
- Namibia
- Nauru

- Nepal

- Netherlands
- New Caledonia
- New Zealand
- Nicaragua

- Niger

- Nigeria
- Niue
- Norfolk Island
- Northern Mariana Islands
- North Korea

- North Macedonia
- Norway
- Oman
- Pakistan

- Palau

- Palestine
- Panama
- Papua New Guinea
- Paraguay
- Peru
- Philippines
- South Korea
- South Sudan
- Spain
- Sri Lanka
- Sudan
- Suriname
- Svalbard and Jan Mayen
- Sweden
- Switzerland

- Syria

- Taiwan
- Tajikistan
- Tanzania
- Thailand

- The Gambia

- Timor-Leste
- Togo

- Tokelau
- Tonga

- Trinidad and Tobago
- Tunisia

- Turkey
- Turkmenistan
- Turks and Caicos Islands
- Tuvalu

- Uganda
- Ukraine
- United Arab Emirates
- United Kingdom
- United States
- United States Minor Outlying Islands

- | | | | |
|--|----------------------------------|---|---|
| <input type="radio"/> Colombia | <input type="radio"/> Jersey | <input type="radio"/> Pitcairn Islands | <input type="radio"/> Uruguay |
| <input type="radio"/> Comoros | <input type="radio"/> Jordan | <input type="radio"/> Poland | <input type="radio"/> US Virgin Islands |
| <input type="radio"/> Congo | <input type="radio"/> Kazakhstan | <input type="radio"/> Portugal | <input type="radio"/> Uzbekistan |
| <input type="radio"/> Cook Islands | <input type="radio"/> Kenya | <input type="radio"/> Puerto Rico | <input type="radio"/> Vanuatu |
| <input type="radio"/> Costa Rica | <input type="radio"/> Kiribati | <input type="radio"/> Qatar | <input type="radio"/> Vatican City |
| <input type="radio"/> Côte d'Ivoire | <input type="radio"/> Kosovo | <input type="radio"/> Réunion | <input type="radio"/> Venezuela |
| <input type="radio"/> Croatia | <input type="radio"/> Kuwait | <input type="radio"/> Romania | <input type="radio"/> Vietnam |
| <input type="radio"/> Cuba | <input type="radio"/> Kyrgyzstan | <input type="radio"/> Russia | <input type="radio"/> Wallis and Futuna |
| <input type="radio"/> Curaçao | <input type="radio"/> Laos | <input type="radio"/> Rwanda | <input type="radio"/> Western Sahara |
| <input type="radio"/> Cyprus | <input type="radio"/> Latvia | <input type="radio"/> Saint Barthélemy | <input type="radio"/> Yemen |
| <input type="radio"/> Czechia | <input type="radio"/> Lebanon | <input type="radio"/> Saint Helena Ascension and Tristan da Cunha | <input type="radio"/> Zambia |
| <input type="radio"/> Democratic Republic of the Congo | <input type="radio"/> Lesotho | <input type="radio"/> Saint Kitts and Nevis | <input type="radio"/> Zimbabwe |
| <input type="radio"/> Denmark | <input type="radio"/> Liberia | <input type="radio"/> Saint Lucia | |

* Publication privacy settings

The Commission will publish the responses to this public consultation. You can choose whether you would like your details to be made public or to remain anonymous.

Anonymous

Only your type of respondent, country of origin and contribution will be published. All other personal details (name, organisation name and size, transparency register number) will not be published.

Public

Your personal details (name, organisation name and size, transparency register number, country of origin) will be published with your contribution.

I agree with the [personal data protection provisions](#)

* Please select the statement(s) that best apply to you

(Your choice(s) will define the parts of the survey that you have access to):

- You are a citizen with a general interest in hazardous substances in electrical and electronic equipment
- You have specific knowledge in the domain of hazardous substances in electrical and electronic equipment and/or Directive 2011/65/EU

Questionnaire for stakeholders and individuals with special knowledge in the domain of hazardous substances in electrical and electronic equipment

Effectiveness

The following questions aim to evaluate the effectiveness of the Directive by determining to what extent its objectives have been achieved as well as by identifying the factors that contribute to or stand in the way of reaching such objectives. The questions furthermore aim to determine if any unexpected or unintended effects linked to the Directive have occurred.

Human health and environment

1. Has the RoHS Directive helped to reduce the use of hazardous substances in electrical and electronic equipment placed on the market?

	Yes	No	Don't know
Electrical and electronic equipment produced and sold in the EU	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Electrical and electronic equipment produced in the EU and sold outside the EU	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Electrical and electronic equipment produced outside the EU and sold in the EU	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

If yes, please indicate the strength of the reduction for the relevant substance (s):

	STRONG	LIMITED	NO EFFECT	DON'T KNOW
Lead	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mercury	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cadmium	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hexavalent chromium	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Polybrominated biphenyls (PBB)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Polybrominated diphenyl ethers (PBDE)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bis(2-ethylhexyl) phthalate (DEHP)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Butyl benzyl phthalate (BBP)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Dibutyl phthalate (DBP)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Diisobutyl phthalate (DIBP)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

2. Has the RoHS Directive helped to protect human health?

- Yes
- To a limited extent
- No
- Don't know

What factors contributed to or stood in the way of protecting human health?

500 character(s) maximum

Factors, which contributed to protect human health: the RoHS Directive has directly contributed to reduce the quantity of hazardous substances present in EEE through substance restriction and to promote substitution. However, scientific evidence is limited.

Factors, which stood in the way of protecting human health: lack of focus on a risk-based approach to restriction and lack of enforcement.

3. Has the RoHS Directive helped to reduce damage to the environment?

- Yes
- To a limited extent
- No
- Don't know

What factors contributed to or stood in the way of reducing damage to the environment?

500 character(s) maximum

Factors, which contributed of reducing damage to the environment: the RoHS Directive has directly contributed to reduce the quantity of hazardous substances present in EEE throughout the life cycle, including use and end of life management phase.

4. Has the RoHS Directive helped to ensure the free movement of electrical and electronic equipment throughout the EU?

- Yes
- To a limited extent
- No
- Don't know

Please elaborate:

500 character(s) maximum

RoHS contributes to the free movement of goods within the EU despite the free movement of electrical and electronic equipment not being the primarily goal of the Directive. The legal base of Article 114 of the EU Treaty secures maximum harmonisation throughout the internal market. However, during implementation at Member States' level certain inconsistencies and different interpretations occur, which the Commission's FAQ document helps to address to some extent, however in a non-binding way.

5. Has the RoHS Directive facilitated the environmentally sound collection and treatment of electrical and electronic waste?

- Yes
- To a limited extent
- No
- Don't know

What factors contributed to or stood in the way of facilitating the environmentally friendly collection and treatment of electrical and electronic waste?

500 character(s) maximum

Considering the reduced presence of restricted substances in EEE, RoHS supports environmentally friendly collection and treatment. However, installed recycling technologies would need to improve further (e.g.: better sorting technologies) to further facilitate environmentally friendly treatment. EU standards EN 50625 & EN 50614 covering the collection, transport, reuse and treatment of WEEE should be applied uniformly by all actors in a harmonised way throughout Europe.

6. In terms of collecting and recycling electrical and electronic waste, to what extent do you agree with the following statements

	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE	DON'T KNOW
I know what to do with electrical and electronic waste	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is easy to recycle electrical and electronic waste	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. In terms of collecting and recycling electrical and electronic waste, to what extent do you agree with the following statements

	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE	DON'T KNOW
Presence of hazardous substances hinders the recycling of electrical and electronic waste	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The information on presence of hazardous substances in electrical and electronic waste is sufficient	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The way in which electrical and electronic waste is recycled reduces risks to the environment	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The way in which electrical and electronic waste is recycled reduces risks to human health	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The information available on the results of electrical and electronic waste treatment is sufficient	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

8. The following hazardous substances hinder environmentally sound treatment of waste electrical and electronic equipment (WEEE)

	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE	DON'T KNOW
Lead	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mercury	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cadmium	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hexavalent chromium	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Polybrominated biphenyls (PBB)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Polybrominated diphenyl ethers (PBDE)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bis(2-ethylhexyl) phthalate (DEHP)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Butyl benzyl phthalate (BBP)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dibutyl phthalate (DBP)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Diisobutyl phthalate (DIBP)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If other, please specify:

500 character(s) maximum

The presence of these substances impacts the WEEE treatment and restrictions positively support environmentally friendly WEEE treatment. However, the applied recycling technology also strongly influences if the WEEE treatment has been environmentally friendly or not. EU standards EN 50625 and EN 50614 covering the collection, transport, reuse and treatment of WEEE should be applied uniformly by all actors in a harmonised way throughout Europe for further improving quality waste management.

9. To your knowledge, has the Directive contributed to the decrease of the following hazardous substances in waste electrical and electronic equipment (WEEE)?

	Yes	No	Don't know
Lead	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mercury	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cadmium	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hexavalent chromium	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Polybrominated biphenyls (PBB)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Polybrominated diphenyl ethers (PBDE)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bis(2-ethylhexyl) phthalate (DEHP)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Butyl benzyl phthalate (BBP)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Dibutyl phthalate (DBP)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Diisobutyl phthalate (DIBP)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

10. Please specify to which specific stream of WEEE your answers apply.

500 character(s) maximum

11. To your knowledge, has the decrease of the listed hazardous substances in WEEE influenced waste treatment operations?

- Yes
- No
- I do not know

12. Is the RoHS Directive enforced by the responsible authorities in your country?

- Yes, fully
- To some extent
- Not at all
- Don't know

Please elaborate:

500 character(s) maximum

13. Are there differences in the enforcement of the RoHS Directive across EU countries?

- Yes
- No
- Don't know

Please elaborate:

500 character(s) maximum

The level enforcement varies from one EU Member State to another. There are no harmonized enforcement activities throughout the EU Member States.

For example, interpretation regarding the categories and what is meant with “equipment” and “large-scale” (stationary industrial tools and fixed installations) varies between different Member States, manufacturers, customers etc.

The Commission RoHS FAQ is a helping tool to some extent, however not legally binding.

14. Has there been any effect of the RoHS Directive on innovation?

- There has been a positive effect
- There has been a negative effect
- There has been no effect

- Don't know

Please provide an example highlighting the positive or negative effect of the Directive on innovation.

500 character(s) maximum

POSITIVE: stronger research for substitution + incentive to improve technology/material use. NEGATIVE: international different scope & substances of non-EU RoHS & EU RoHS increase effort & complexity in communication. POSITIVE for substance innovation BUT NEGATIVE for circular economy innovation: RoHS impacts remanufacturing & using recyclates since reused EEE or EEE made of recyclates containing substances in concentrations exceeding current thresholds not allowed to be made available in EEA.

15. Has the RoHS Directive had any effect on your expenditure on research and investment?

- There has been a positive effect
- There has been a negative effect
- There has been no effect
- Don't know

Please provide an example highlighting the positive or negative effect of the Directive.

500 character(s) maximum

POSITIVE effect on expenditure on research&investment + level playing field created awareness on the content of substances+increase of resources dedicated to research&innovation, especially to substitute restricted substances.
NEGATIVE: not always considered as positive, since the additional R&D expenses were considered sometimes as a cost, rather than investments dedicated to improving equipment performances.
POSITIVE for substance innovation BUT NEGATIVE for circular economy: see Q.14

16. What has been the overall impact of the RoHS Directive in the EU on exports from the EU to a third country?

- Exports increased
- Exports decreased
- There has been no effect on exports to third countries
- Don't know

17. What has been the overall impact of the RoHS Directive in the EU on imports to the EU from a third country?

- Imports increased
- Imports decreased
- There has been no effect on imports from third countries
- Don't know

18. Are there specific examples that illustrate the effect of the Directive on trade?

500 character(s) maximum

19. Beyond the main objectives of the RoHS Directive, have there been any unexpected negative or positive changes as a result of this Directive?

500 character(s) maximum

POSITIVE: EU leading role in the world + RoHS helped to improve communication on material and component knowledge through the supply chain + original RoHS intention was to contribute to the protection of human health & the environment. Its provisions now also aim at supporting the circular economy to some extent.

NEGATIVE: financial & administrative burden + no harmonized enforcement worldwide + highly increased communication requirements over the whole product lifetime

Efficiency

The following questions aim to evaluate the efficiency of the Directive by identifying the main costs and benefits of implementing it. More importantly, this section aims to assess to what extent the benefits of the restriction on the use of hazardous substance justify the costs of the Directive. Furthermore, the aim of these questions is to obtain information and data to assess if there have been significant differences in costs and benefits between Member States as well as identifying if there was any possibility to increase efficiency. These questions aim at understanding whether the Directive has led to unnecessary burden or made the system unnecessarily complex.

20. What are the benefits of the Directive for the economy? Please select all that apply:

- Increased a level playing field for economic operators;
- Increased legal certainty regarding hazardous substances;
- Creation of jobs in customs, inspections
- Creation of jobs in electrical or electronic equipment waste treatment and recycling;
- Creation of jobs in R&D for electrical and electronic equipment
- Easier identification of whether electrical and electronic equipment are legally placed on the market through the CE mark;
- Trading costs are reduced when selling electrical and electronic equipment to a different Member State
- No benefits
- Other

21. What are the benefits of the Directive for the environment? Please select all that apply:

- Led to a larger number of product designs of electrical and electronic equipment that are more circular in nature;
- The substance restrictions provided manufacturers with incentives to find alternatives to hazardous substances;
- Avoided emissions of hazardous substances into soil, air and water streams through reduction of use of hazardous substances in producing electrical and electronic equipment;
- Avoided emissions of hazardous substances from electrical or electronic equipment waste into soil, air and water streams;
- Avoided clean-up of emissions of hazardous substances from waste illegally dumped into the environment;

- Improved recyclability of electrical and electronic equipment;
- No benefits;
- Other

22. What are the benefits of the Directive for the society? Please select all that apply:

- Avoided negative health effects on consumers from emissions of hazardous substances from electrical or electronic equipment waste;
- Avoided negative health effects on workers due to exposure to hazardous substances from production, use or end-of-life phase of electrical or electronic equipment;
- Avoided health costs to workers due to exposure to hazardous substances from production, use or end-of-life phase of electrical or electronic equipment;
- No benefits;
- Other

* If other, please specify:

500 character(s) maximum

RoHS may have positively contributed to the proposed areas, however, limited scientific evidence is available.

23. Do your company/ the companies you represent have the obligations of a manufacturer under the RoHS Directive?

- Yes
- No
- Don't know

24. What aspects of the RoHS Directive do you have to comply with? Please tick all that apply

- Restrictions
- Declaration of Conformity
- CE marking
- Other

If other, please specify:

500 character(s) maximum

RoHS Article 5 implementation

24.1 How long does it take to complete a declaration of conformity?

- Less than one working hour
- Less than half a working day
- Less than a working day
- More than a working day
- Don't know

24.2 How often do you have to update the declaration of conformity for a given product, please specify?

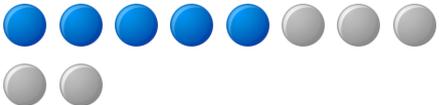
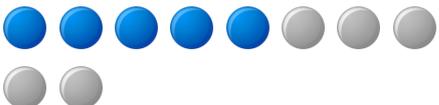
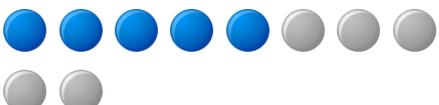
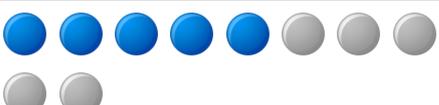
500 character(s) maximum

No one size fits all answer possible, depends on the case. In general, the declaration of conformity needs to be updated depending on changes in supplier processes and when changes in legislation enter into force, e. g. amendments or expired exemptions. Changes are also made further to customer requests.

25. In your experience, what are the costs for your company/ the companies you represent triggered by the RoHS Directive (please consider both monetary and non-monetary costs)?

Please indicate from a scale of 0-10 the significance of the following costs:

Costs related to training and information measures;	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
Costs of collecting and reviewing information;	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
Costs related to a dedicated IT system to manage all required pieces of information;	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
Costs related to the technical documentation;	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
Costs related to the conformity assessments;	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
Costs related to purchasing standards;	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
Costs related to exemption procedures;	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
Costs related to the adaptation to amendments to Annexes;	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
Costs for complying with the rules for the CE mark;	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
Getting supply chain information;	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>

Monetary losses related to RoHS 2 compliance;	
Capital expenditure;	
R&D expenditure;	
Operating expenditure;	
Other	

If other, please specify:

500 character(s) maximum

We replied 5 to all questions as responses vary from 0 to 10 depending on companies. Orgalim represents companies of different sizes manufacturing a wide range of equipment. Financial & administrative costs for companies in implementing RoHS are very significant. Very high efforts required to prove product conformity throughout the entire supply chain & directly related to complexity of products and size of supply chain. Purchase costs for standards minor & research costs can be substantial.

26. How many full time equivalent (FTE) employees do you have working on the RoHS compliance per year?

- None
- Less than 0.25
- Less than 0.5 FTE
- Less than 0.75 FTE
- Less than 1 FTE
- Less than 2 FTEs
- Less than 3 FTEs
- More than 3 FTEs
- Other
- Don't know

If other, please specify:

500 character(s) maximum

It is not possible to give such an estimation considering Orgalim represents companies of different sizes, from SMEs to global companies, which are manufacturing a wide range of equipment.

27. Have you made any initial investment to comply with RoHS?

- Yes

- No
- Don't know

Please express the initial investment costs due to RoHS compliance in percentage:

Yes but it is not possible to give a precise estimation considering Orgalim represents companies of different sizes, from SMEs to global companies, which are manufacturing a wide range of equipment.

28. Has your operational costs/ the operational costs for the companies you represent increased due to the compliance with RoHS?

- Yes
- No
- Don't know

Please express the increase in operational costs due to RoHS compliance in percentage:

It is not possible to give such an estimation considering Orgalim represents companies of different sizes, from SMEs to global companies, which are manufacturing a wide variety of different equipment. However, almost all companies in EEE sector experienced a significant increase in costs (both monetary and non-monetary) due to the compliance with RoHS. Depending on the company, the increase in operational costs due to RoHS compliance is explained by the following elements:

- Costs to communicate about the RoHS compliance in the supply chain
- Declaration of conformity costs
- Costs for production increased and therefore also the costs of EEE increased
- Investments for manufacturing companies

In case RoHS will be reviewed, we ask the European Commission to conduct a cost benefit impact assessment.

29. Do you think that the benefits of the Directive justify the costs of implementation?

- Yes
- No
- Don't know

30. Have you encountered problems to place an electrical and electronic on the market in the EU?

- Yes
- No
- Don't know

31. How significant are the following problems? 5 = most significant, 1 = least significant

	1	2	3	4	5
It is difficult to decide whether a product is an electrical and electronic equipment or not.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

It is difficult to decide whether a product is excluded from scope or not.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
The categories of Annex I are not well defined.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Existing guidance documents are not sufficient.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
The rules for the CE marking are not clear.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
The system of exemptions is too complex.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Market surveillance is acting differently in different Member States.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internet shops cannot be effectively controlled.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Sanctions for non-compliance are different in different Member States.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sanctions for non-compliance are too strict.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Customs authorities have to refer to the market surveillance authority in case they suspect that an electrical and electronic equipment is non-compliant. This blocks my imports.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Market surveillance is not always targeting the 'bad guys'.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Other	<input type="radio"/>				

32. Have you encountered problems to place electrical and electronic equipment on markets outside the EEA with similar legislation as the RoHS Directive?

- Yes
- No
- Don't know

If yes, please specify the country:

It is complex for companies operating in different regions of the world to relate to so many different variations of substance restriction legislation. The problems arise when the legislation is quite similar but not equal to Europe. They may differ in important points or in additional and different methodology, such as e.g. China RoHS and Korea RoHS.

33. Has the Directive decreased differences in the administrative processes relating to RoHS compliance among Member States?

- Yes
- No
- Don't know

If yes, please provide examples of how has the Directive decreased differences in the administrative processes among Member States

500 character(s) maximum

Declaration of conformity, placing on the market.

34. Please specify any provision of the RoHS Directive that is particularly efficient

500 character(s) maximum

- The targeted number of priority substances restricted has been effective (as opposed to the 201 substances on the REACH Candidate List).
- Declaration of conformity (Article 13) & conditions for affixing the CE marking (Article 15)
- The existence of an exemption mechanism is exemplary in EU chemicals legislation and as such efficient. However important implementation issues exist.

35. Please specify any provision of the RoHS Directive that is particularly inefficient

500 character(s) maximum

- Exemptions dossiers must be handled more quickly as the time required by the Commission to grant an exemption is today 3 years or more compared to 12-18 months in 2006.
- The fact that exemptions where there is no alternative in the foreseeable future, also need to be renewed, is costly.

36. What has been the effect of the RoHS Directive on the competitiveness and comparative advantage of your company/ the companies you represent?

	INCREASED	NO EFFECT	DECREASE	DON'T KNOW
Production costs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Prices for consumers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Margins for producers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Don't know	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

37. Are you aware of the possibility to ask for exemptions from the substance restrictions set by the RoHS Directive?

- Yes
- No

38. Has your organisation or company...

- Asked for an exemption
- Considered asking for an exemption
- Not asked for an exemption

39. To which extent does the exemption system generate administrative burden?

- To a large extent
- To some extent
- To a small extent
- Not at all
- Don't know

Coherence

The following questions aim to evaluate the coherence of the Directive with other EU legislation and the internal coherence of the Directive. More importantly, this section aims to understand how the presence or lack of coherence impacts the functioning of the Directive. Additional questions seek to explore whether the Directive has influenced the development of similar legislation in jurisdictions outside the EU.

40. The RoHS Directive interacts with other EU legislation and standards. Are you aware of any unnecessary overlaps, gaps and contradictions between the Directive and the following EU legislation

	Yes	No	Don't know
Waste Framework Directive	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Waste Electrical and Electronic Equipment (WEEE) Directive	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
End-of-life vehicles (ELV) Directive	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Batteries Directive	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Waste Shipment Regulation	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) Regulation	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Classification, Labelling and Packaging (CLP) Regulation	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Persistent Organic Pollutants (POP) Regulation	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Regulation on accreditation and market surveillance	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Eco-design Directive	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

If other, please specify:

Exhaust emission regulation: different definitions of Non-Road Mobile Machinery.
Green Public Procurement: different values for chemicals.

If yes, please explain and indicate which impact this may have on the functioning of the Directive:

500 character(s) maximum

Examples of unnecessary overlaps, gaps & contradictions between RoHS & following other EU legislation:

- Eco-design: phase out of some lamp types in RoHS/Eco-Design is different
- REACH: double regulation of the same substances, for example group entry 51 "phthalates", EEE within the scope of RoHS are exempted, but the spare parts, components and supplied parts are not; for SMEs it can be easier to work with RoHS than REACH since better targeted and focused on their sphere of activity.

41. Are you aware of any different limit values for chemicals applying to the same products in other EU or national legislation?

- Yes
- No
- Don't know

If yes, please specify:

500 character(s) maximum

For example, the cadmium limit under other EU legislation is less strict, such as the EU Ship recycling Regulation is 0.1% whereas the cadmium limit under REACH & RoHS is 0.01%.

42. Have you encountered any gaps, contradictions, overlaps or missing links within the Directive?

- Yes
- No
- Don't know

Please explain and indicate which impact this may have on the functioning of the Directive:

500 character(s) maximum

For example, regarding the timing for exemption renewal, the industry has to work on renewal dossiers while the previous procedure is not yet closed.

43. Has the Directive had a notable influence on the development, structure and functioning of legislation concerning the restriction of hazardous substances in electrical and electronic equipment in jurisdictions outside the EU?

- Yes
- No
- Don't know

Please explain and provide examples if relevant:

500 character(s) maximum

There is a lot of RoHS-like legislation in other regions of the world, with varying scopes and maximum concentration values, but clearly inspired by the EU. There are often the same 6 basic restrictions for example in China, Brazil, Japan, Arab states, Korea, Russia, Turkey, Singapore, Ukraine, India and California.

Relevance

The following questions aim to evaluate to what extent the issues or problems addressed by the Directive still exists and whether the objectives of the Directive are adequate to address those issues.

44. To what extent do you agree that there is still a need for EU legislation on hazardous substances in electrical and electronic equipment to achieve the following objectives?

--	--	--	--	--	--

	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE	DON'T KNOW
Protection of human health	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Protection of the environment	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ensuring the environmentally sound recovery and disposal of electrical and electronic waste	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ensuring a well- functioning internal market	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

45. Does the list of restricted substances (Annex II) require any modifications? Please select all that apply

- No modifications required
- It requires the listing of new substances
- It requires the de-listing of substances
- It requires the change of concentration values
- Don't know

46. Annexes III and IV of the Directive provide a list of applications exempt from the restriction of Article 4. Is this list up-to-date with the most recent technical and scientific progress?

- Yes
- No
- Don't know

47. To what extent do you agree that the application and assessment process for the adaptation of Annexes III and IV to scientific and technical progress (Art. 6 of the Directive) is fit for purpose?

- Strongly agree
- Agree
- Disagree
- Strongly disagree
- Don't know

Please describe which aspects of the application and assessment process are not fit for purpose and in what respect

500 character(s) maximum

Insufficient human resources dedicated by the European Commission to tackle exemption requests that were filed by industry on time and with the required documentation on time.

48. To what extent do you agree that the obligations which the Directive lays down for the following actors are still sufficient to ensure the continued achievement of the Directive's objectives?

--	--	--	--	--	--

	Strongly agree	Agree	Disagree	Strongly disagree	Don't know
Manufacturers of electrical and electronic equipment	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Authorised representatives of manufacturers	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Importers of electrical and electronic equipment	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Distributors of electrical and electronic equipment	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

49. Are you aware of any issues related to hazardous substances in electrical and electronic equipment that the RoHS Directive does not address?

500 character(s) maximum

In the waste hierarchy, prevention takes precedence over waste treatment. Therefore, the development of durable products and a long availability of spare parts is an important objective of the circular economy. Substance restrictions limit the availability of high performance materials without which durable products cannot be realized. The "repair as produced principle" to be aimed at for spare parts is particularly important for future Annex II extensions in order to avoid legal loopholes.

EU added value

The following questions aim to compare what has been achieved through the implementation of the Directive with what could have been achieved by Member States acting at national, regional and at international levels alone. Additional questions seek to assess whether the issues addressed by the Directive continue to require action at EU level.

50. What consequences do you think would the withdrawal of the RoHS Directive have for achieving the objectives of the Directive?

	POSITIVE CONSEQUENCES	NO CONSEQUENCES	NEGATIVE CONSEQUENCES	DON'T KNOW
Protection of human health	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Protection of the environment	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Environmentally sound recovery and disposal of electrical and electronic waste	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Ensuring a well-functioning internal market	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

51. Are there any activities or tasks currently performed at EU level that should be performed by Member States instead?

500 character(s) maximum

No, product legislation needs to be harmonised at EU level to secure the functioning of the internal market and free circulation of goods in the EU.

52. In your opinion, who should be responsible for ensuring the safety of hazardous substances contained in electrical and electronic equipment in the EU?

- Authorities of the European Union
- National authorities
- Manufacturers themselves
- Don't know
- Other

If other, please specify

It is difficult to interpret the question.
 If “enforcement” is meant, the response is “national authorities” (Member States).
 If “compliance” is meant, the response is “manufacturers themselves”.
 Any actor in the supply chain, including recyclers, have a role to play, too.

53. To what extent do you agree with the following statements concerning the EU added value of RoHS

	Agree	Do not agree	Do not know
RoHS creates a large market for the same electrical and electronic equipment.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
RoHS creates market for the same electrical and electronic equipment outside the EEA.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
RoHS simplifies the trade of electrical and electronic equipment in the EU.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
RoHS supports innovation and use of hazardous-free products.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Additional comments

If you have any further comments, please add them in the box below:

1000 character(s) maximum

If you wish to share any evidence reports, studies or position papers, please upload them here.
 Please note that the uploaded document(s) will be published alongside your response to the questionnaire,

which is the essential input to this online public consultation. The document is an optional complement and serves as additional background reading to better understand your position.

Please upload your file

The maximum file size is 1 MB

Only files of the type pdf,txt,doc,docx,odt,rtf are allowed

277508e6-ce06-46ce-8cb4-120a421bf664/ORGALIM_PP_RoHS_EVALUATION_2019_12_06_final.pdf

Contact

ENV-ROHS@ec.europa.eu