

TOSHIBA

Toshiba Lighting & Technology Corporation
Green Procurement Guidelines
(Ver.8.2)

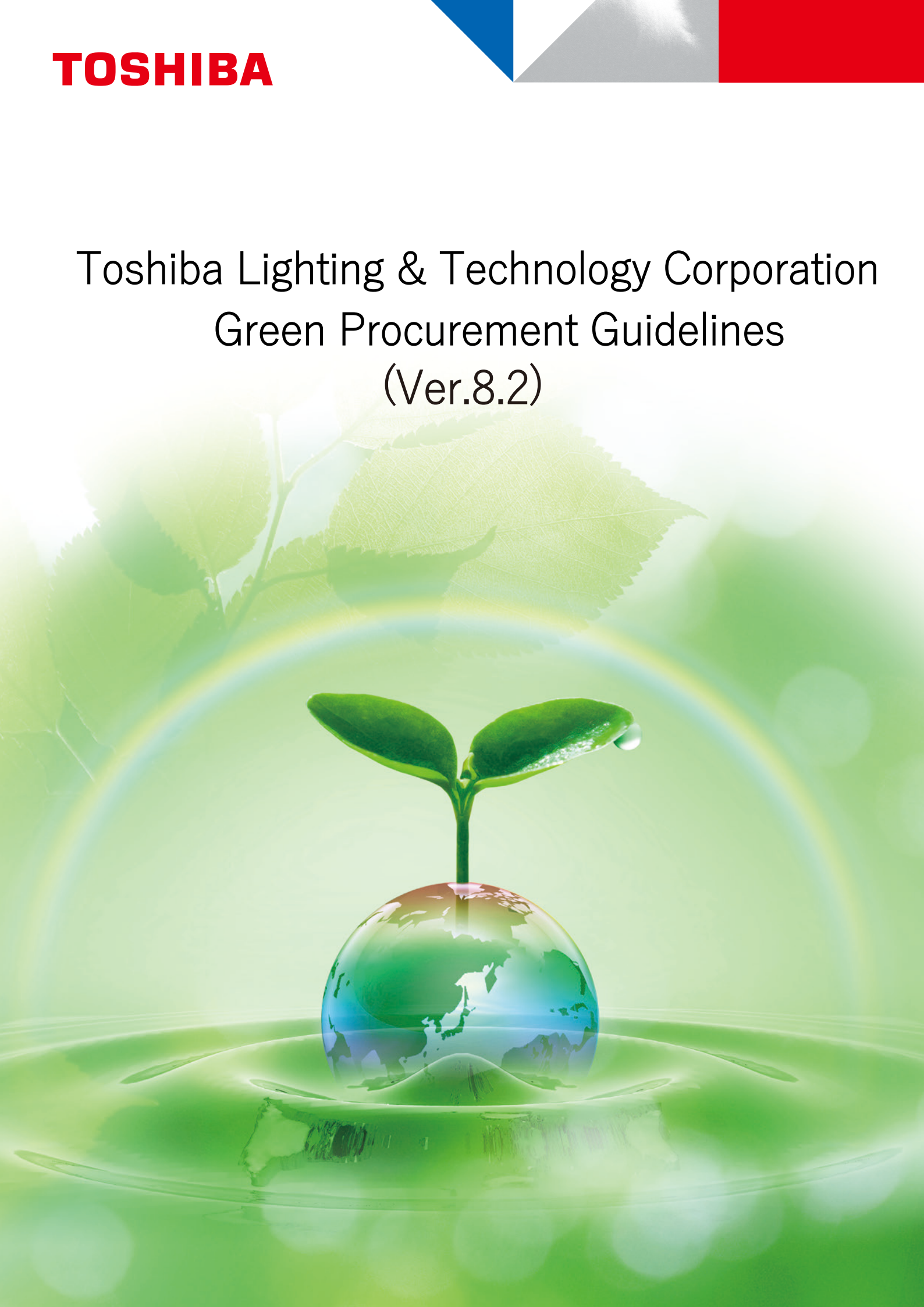


Table of Contents

1. Foreword

2. Toshiba Group's Environmental Future Vision 2050

3. Purpose of Green Procurement

4. Scope of Application of Green Procurement

5. Requests to Suppliers

5.1 Promotion of environmental management in accordance with Toshiba Group's Procurement Standards

(1) Construction of an environmental management system

(2) Formulation of a basic environmental policy

(3) Promotion of environmental impact reduction activities

(a) Response to climate change

(b) Response to the circular economy

(c) Consideration of ecosystems

(d) Other management items

(4) Promotion of management of chemical substances in products delivered to Toshiba Group

(a) Construction of a management system for chemical substances in supply items

(b) Management of chemical substances in supply items

5.2 Conclusion of agreements for assuring the environmental quality of supply items

5.3 Cooperation in surveys

(1) Evaluation of suppliers' environmental management

(2) Surveys of chemical materials/substances in supply items

(3) Other surveys necessary to ensure "5.1 Promotion of environmental management in accordance with Toshiba Group's Procurement Standards" above

6. Specific Operation of Green Procurement

6.1 Scope of Application

6.2 Methods of Investigation

<Appendix 1>

Toshiba Group List of Environment-Related Materials/Substances (in Products)

Rank A: Prohibited materials/substances

<Appendix 2>

Toshiba Group List of Environment-Related Materials/Substances (in Products)

Rank B: Managed materials/substances

<Appendix 3>

Rank B: Managed materials/substances

1. Foreword

"Committed to People, Committed to the Future." is the long standing Basic Commitment of Toshiba Group, a statement that expresses our enduring credo to contribute to the development of society through our business. Since our founding, with the venture spirit that has inspired Toshiba for many generations, our purpose has been to combine the power of invention with our expertise and desire for a better world, to tackle increasingly complex and serious social issues, and to turn on the promise of a new day.

It is essential for Toshiba Group to contribute to resolving environmental issues and other social issues with our highly reliable products and services, thereby realizing a sustainable society, and to further increase corporate value. To achieve these goals, we believe that it is important to respond to global trends from a long-term viewpoint.

Based on this idea, Toshiba Group has formulated "Environmental Future Vision 2050" as a new long-term vision from a global perspective that responds to such issues as carbon neutrality and the transition to a circular economy. With the goal of "contributing to the realization of a sustainable society through environmental management which aims to create enriched value and to ensure harmony with the earth," it aims to realize a sustainable society—in other words, a decarbonized society, a resource circulating society, and a society in harmony with nature—by promoting the implementation of initiatives in three areas: "response to climate change," "response to the circular economy," and "consideration of ecosystems." Toshiba Group considers "response to climate change" in particular to be our top priority task for the Group's environmental management, and we aim to achieve carbon neutrality throughout the entire value chain by FY2050. This vision is in line with Toshiba Group's Basic Policy for the Environment and represents the ideal situation for 2050 as envisioned by the Group.

To realize Environmental Future Vision 2050, it is essential to consider the environment throughout the entire supply chain. Green procurement, which involves procuring products, parts and components, and materials and services, etc. with minimal environmental impacts from suppliers that proactively promote environmental management, is a high priority initiative for Toshiba Group. The Guidelines present Toshiba Group's basic concept of green procurement and the specific content of our requests to suppliers. We invite our suppliers to work hand in hand with us to make green procurement a resounding success.

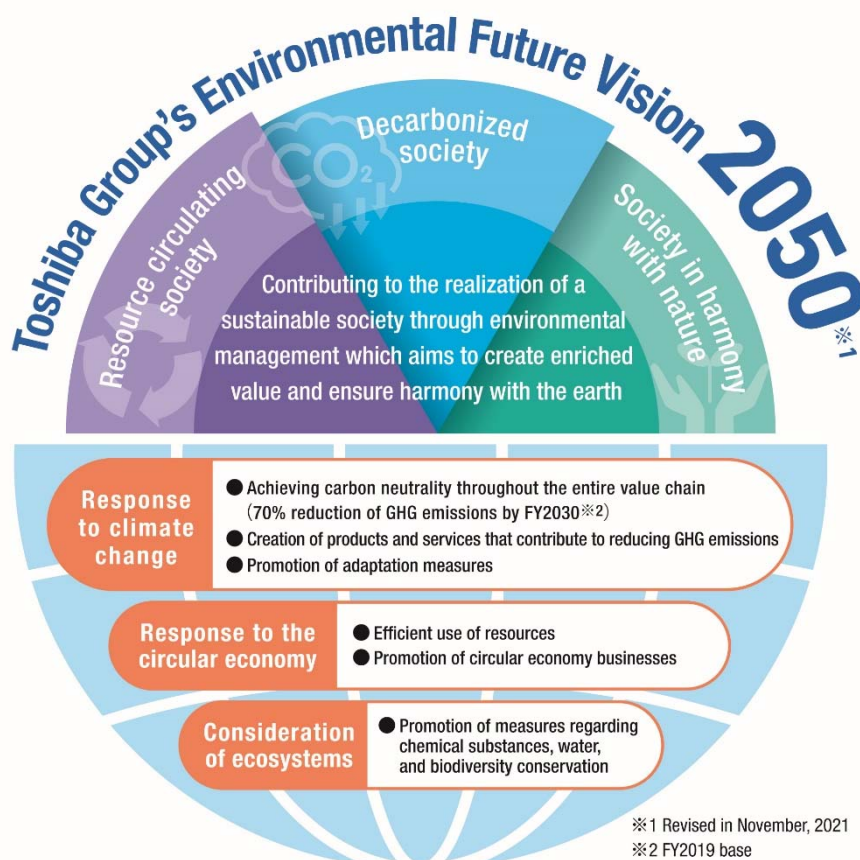
Procurement Division Procurement Control & Compliance Promoting Division
Corporate Production Planning Division Environment Management Office
Toshiba Corporation

2. Toshiba Group's Environmental Future Vision 2050

With the goal of "contributing to the realization of a sustainable society through environmental management which aims to create enriched value and to ensure harmony with the earth," Toshiba Group's long-term environmental vision, Environmental Future Vision 2050, aims to realize a sustainable society—in other words, a decarbonized society, a resource circulating society, and a society in harmony with nature. As for specific areas of activities, we have selected response to climate change and resource issues in both business activities and products and services, management of water resources and chemical substances, and conservation of biodiversity. Under "response to climate change," we aim to achieve carbon neutrality throughout the Group's entire value chain by FY2050. As a milestone, we aim to reduce GHG emissions by 70% by FY2030 compared to the FY2019 level.

To achieve the Vision, we have formulated Environmental Action Plan and are promoting activities in the selected areas and managing progress while reviewing the Plan every few years.

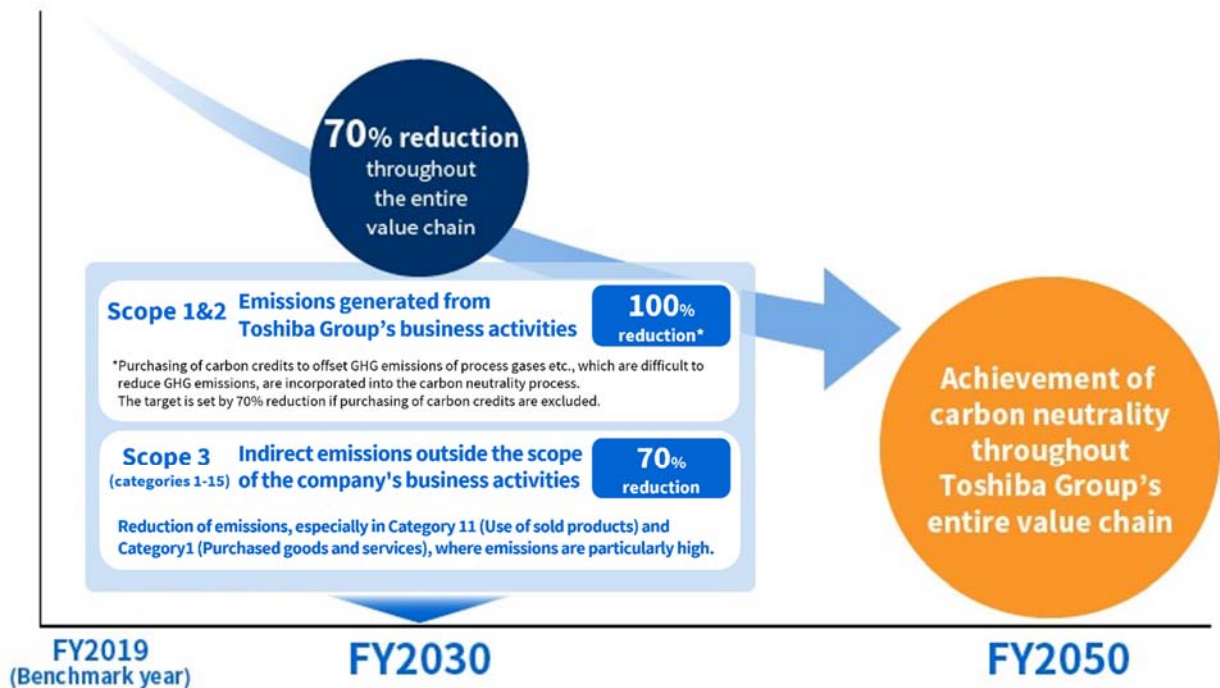
■ Toshiba Group's Environmental Future Vision 2050



Toshiba Group's Environmental Future Vision 2050:

<https://www.global.toshiba/ww/environment/corporate/vision/vision2050.html>

■ Breakdown of Greenhouse Gas Reduction Targets Toward Carbon Neutrality



■ Toshiba Group's Environmental Action Plan:

<https://www.global.toshiba/ww/environment/corporate/vision/plan2.html>

3. Purpose of Green Procurement

In collaboration with our suppliers, Toshiba Group aims to procure products, parts and components, and materials and services, etc. with minimal environmental impacts from suppliers that proactively promote environmental management. Through such efforts, we will create environmentally conscious products and services that contribute to reducing environmental impacts throughout their life cycles, thereby contributing to the realization of a sustainable society—in other words, a decarbonized society, a resource circulating society, and a society in harmony with nature, as envisioned in Environmental Future Vision 2050.

4. Scope of Application of Green Procurement

The Guidelines apply to all products, parts and components, and materials, etc. (hereinafter collectively referred to as "supply items") to be delivered as well as services to be provided to Toshiba Group.

5. Requests to Suppliers

This section describes specific requests to suppliers. We request that suppliers engage in activities in accordance with the Green Procurement Standards defined by Toshiba Group as well as to conclude agreements with us for assuring environmental quality of supply items and to cooperate in various surveys. We also ask our suppliers to request their suppliers to understand the Guidelines and to promote activities accordingly. Due to industry trends and other circumstances, the details of requests to suppliers may differ among Toshiba Group companies, so check the Green Procurement Guidelines issued by the office in charge of procurement of the relevant Toshiba Group company, division, operations, complex, factory, etc. Such Green Procurement Guidelines shall take precedence over those described in this document.

5.1 Promotion of environmental management in accordance with Toshiba Group's Procurement Standards

We will prioritize transactions with suppliers who more actively promote environmental management in accordance with the following procurement standards defined in connection with Environmental Future Vision 2050 (*1).

(1) Construction of an environmental management system

The company has constructed an environmental management system in accordance with ISO14001:2015 or equivalent and can demonstrate conformance to the standard through a third-party certification etc., or is preparing to be able to do so.

(2) Formulation of a basic environmental policy

The company has established its own basic environmental policy that describes the company's thoughts on the environment in detail and has shared the policy within the company.

(3) Promotion of environmental impact reduction activities

The company is engaging in the following activities to reduce environmental impacts that are related to "response to climate change," "response to the circular economy," and "consideration of ecosystems," which are the initiatives of Environmental Future Vision 2050.

(a) Response to climate change

(a)-1-1 Has set the company's own GHG emissions (Scope1(*2) and Scope2(*3)) reduction target(s) and is managing progress.

(a)-1-2 (If you have set the target(s))

The target(s) is consistent with the standard of limiting the global average temperature increase to 1.5°C above pre-industrial levels (reduction target: at least 4.2% reduction each year). (*4)

(If you have not set the target(s))

Reduction target(s) and performance management are expected to be set within two years.

(a)-2-1 Has set a GHG emissions reduction target(s) for emissions from other companies related to your company's activities (Scope 3 (*5)), and is managing progress.

(a)-2-2 (If you have set the target(s))

The target(s) is consistent with the standard of limiting the global average temperature increase well below 2°C above pre-industrial levels (reduction target: at least 2.5% reduction each year). (*6)

(If you have not set the target(s))

Reduction target(s) and performance management are expected to be set within two years.

- (a)-3 Has declared to achieve carbon neutrality within the company or throughout its value chain.
- (a)-4 Has requested that the company's primary suppliers reduce their GHG emissions.

(b) Response to the circular economy

- (b)-1 Has set (quantitative and/or qualitative) activity target(s) for waste reduction in the company's business activities and is managing progress.
- (b)-2 Has set (quantitative and/or qualitative) activity target(s) regarding reduction and recycling of products and services that the company manufactures or provides as well as packing and packaging materials, and is managing progress (*7).

(c) Consideration of ecosystems

- (c)-1 Has set (quantitative and/or qualitative) activity target(s) for chemical substance management in the company's business activities and is managing progress (*8).
- (c)-2 Has set (quantitative and/or qualitative) activity target(s) for chemical substance management regarding products and services that the company manufactures or provides, and is managing progress (*9).
- (c)-3 Has set (quantitative and/or qualitative) activity target(s) for proper management of water resources in the company's business activities and is managing progress (*10).
- (c)-4 Has set (quantitative and/or qualitative) activity target(s) for the company's biodiversity conservation activities and is managing progress (*11).

(d) Other management items

- (d)-1 Has constructed a management system for environmental risks, and has procedures in place for preventive and corrective measures (*12).
- (d)-2 Provides employees with environment-related education, including on legal compliance management (*13).

(4) Promotion of management of chemical substances in products delivered to Toshiba Group

The company is conducting the following activities to promote delivery of products as well as parts and components, etc. with minimal environmental impacts.

(a) Construction of a management system for chemical substances in supply items

The company has established response procedures in the event of non-compliance, etc. with respect to its chemical substance management regulations, etc.; has ensured that all parties concerned in the organization are aware of such procedures; and thoroughly investigates the causes and implements recurrence prevention measures.

(b) Management of chemical substances in supply items

- (b)-1. The company is aware of the two categories, namely "Rank A (Prohibited materials/substances)" and "Rank B (Managed materials/substances)" (listed in the table below) defined by Toshiba Group for the purpose of managing chemical substances in supply items, and manages chemical substances belonging to each of these categories in accordance with Toshiba Group List of Environment-Related Materials/Substances (in Products). (Appendix 1, Appendix 2).

■ Two categories of chemical substance management

Category	Definition	Materials/substances
Rank A (Prohibited materials/substances)	Materials/substances whose presence is prohibited in procurement items (including packaging) in Toshiba Group. Materials/substances whose use in products (including packaging) is prohibited or restricted by domestic and foreign laws and regulations.	Appendix 1
Rank B (Managed materials/substances)	Materials/substances whose environmental impact should be reduced, based on their actual usage, via reduction of use and substitution, or recovery and detoxification in a closed system.	Appendix 3

(b)-2. Toshiba Group has established Appendix 2 of "Prohibited substances in product safety design" and manages the chemical substances contained in procured products.

5.2 Conclusion of agreements for assuring the environmental quality of supply items

To ensure the environmental quality of supply items, we request each supplier to conclude a Quality Assurance Agreement prior to transactions. In addition, we may request a supplier to submit an Agreement Concerning the Restriction of the Use of Specified Hazardous Substances as necessary.

5.3 Cooperation in surveys

To confirm the status of suppliers' initiatives concerning "5.1 Promotion of environmental management in accordance with Toshiba Group's Procurement Standards" above, we ask suppliers to cooperate in various surveys, including regarding the following items:

(1) Evaluation of suppliers' environmental management

To strengthen partnerships with suppliers that are proactively engaged in environmental management activities, we periodically evaluate the status of environmental management activities by suppliers. We determine ranks based on the response results, and we prioritize procurement from suppliers who are rated highly. For suppliers with low ratings, Toshiba Group may plan remediation activities, make requests for remediation, and provide guidance and assistance. In addition, if a supplier does not make improvements according to the remediation plan despite receiving a request for remediation and the provision of guidance and assistance, we may stop transactions with said supplier.

(2) Surveys of chemical materials/substances in supply items

Prior to the approval of new procurement items from suppliers and judgment as to whether existing procurement items require substitution, we conduct surveys concerning the presence of the chemical materials/substances in procurement items. The main items of the surveys are as follows:

- Confirmation of the non-use of prohibited materials/substances via the "Declaration of Use/Non-use of Environment-Related Materials/Substances (in Products)"
- Survey on the use/non-use and content of any substance of very high concern (SVHC, *14) to be a candidate for authorization under the EU REACH Regulation (chemSHERPA®, *15)
- Survey on the analysis and evaluation results

(3) Other surveys necessary to ensure "5.1 Promotion of environmental management in accordance with Toshiba Group's Procurement Standards" above

- *1: Standard items may differ depending on the supplier's business category, supply item type, necessity, etc. In addition, standard items are subject to change. For the details of the latest standard items, refer to the Green Procurement Guidelines issued by the relevant Toshiba Group company, division, operations, complex, etc.
- *2: Direct emissions from owned or controlled sources (e.g., fuel combustion and industrial processes).
<https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf>
- *3: Indirect emissions from the generation of purchased energy (e.g., electricity, heat, or steam).
<https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf>
- *4: This standard is consistent with the SBT approval criteria. SBT (Science Based Targets) are scientifically grounded GHG reduction targets set by companies on a medium- to long-term basis in order to limit the global average temperature increase this century well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5°C. Companies are now required to set up SBTs based on collaborations with their suppliers to reduce GHG emissions throughout their value chain.
- *5: All indirect emissions (not included in scope 2) that occur in the value chain of the company, including both upstream and downstream.
<https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf>
- *6: Same as *4.
- *7: The amount of resources saved and plastic resources recycled in products manufactured or provided by the company as well as packing and packaging materials, promotion of circular economy businesses, etc.
- *8: The amount or management method of chemicals emitted during the company's business activities, etc.
- *9: The amount or management method of specified chemical substances contained in products manufactured or provided by the company, etc.
- *10: Water risk assessment, management of amount of water received, wastewater recycled, rainwater used, etc.
- *11: Establishment of biotopes, green space management, protection of rare species within the premises as well as conservation of forests, rivers, and oceans outside the premises, etc.
- *12: Development and formulation of company-wide policies and regulation on environment-related legal compliance management, and implementation of legal compliance management in accordance with such policies and regulations.
- *13: Promotion of awareness-raising education on legal compliance, including sharing of the latest trends in legal regulations, the company's environmental risk management system, and case studies on accidents that have occurred within the company, etc.
- *14: Substance of Very High Concern (SVHC). Substances that fall under the criteria defined in Article 57 of the EU REACH Regulation and that have been selected as candidate substances for authorization according to the procedure defined in Article 59 of said regulation.
- *15: A scheme for communicating information on the chemical substances contained in products; this scheme is available across the supply chain.

6 . Specific Operation of Green Procurement

6.1 Scope of Application

The Standards apply to “all the procurement items (such as finished goods, system components, units, parts, materials, packing materials) that compose products produced and sold by Toshiba Lighting & Technology Corp. Depending on the circumstances in the industry, the targeted environmental substances may vary product by product.

Product	Target environment hazardous substances
General Lighting Products	• Substances listed in Toshiba Group’s list of environmentally hazardous substances.
Automotive Products	• Substances listed in Toshiba Group’s list of environmentally hazardous substances. • Substances regulated by GADSL
EU and RoHS compliant Products	• Substances listed in Toshiba Group’s list of environmentally hazardous substances.
Others	• Substances listed in Toshiba Group’s list of environmentally hazardous substances.

Regarding the use of substances prohibited or restricted by regional or country laws and ordinances, the laws and ordinances must be observed and followed even though the substances and their uses are not clearly regulated in this Standard.

6.2 Methods of Investigations

Prior to the approval of new procurement items and judgment as to whether existing procurement items require substitution, we conduct surveys concerning the presence of the chemical materials/substances in procurement items. The survey contents may vary according to the types and necessity of supply items. The main survey items are as follows:

Product	Submitted documents
General Lighting Products and Others	(Form1) Use/Non-use Declaration of specific chemical substances (Form2) Investigation Report on the Environmentally Hazardous Substances (*16) or chemSHERPA ®(*17) (Form3) Supplier Environmental Management Evaluation Chart (Form 4) Agreement on Green Procurement
Automotive Products	(Form1) Use/Non-use Declaration of specific chemical substances (Form2) Investigation Report on the Environmentally Hazardous Substances (*16) (Form3) Supplier Environmental Management Evaluation Chart (Form 4) Agreement on Green Procurement
EU and RoHS compliant Products	(Form1) Use/Non-use Declaration of specific chemical substances (Form2) Investigation Report on the Environmentally Hazardous Substances (*16) or chemSHERPA ®(*17) (Form3) Supplier Environmental Management Evaluation Chart (Form 4) Agreement on Green Procurement

*16 : Investigation Report on the Environmentally Hazardous Substances

- ① This investigation report should include the investigation result of the environmentally hazardous substances for all the parts, components, raw materials, packing materials and other items that are currently procured or planned to be procured by Toshiba Lighting & Technology

Corp. The report should be submitted both by a printed document and an electronic file (excel format).

- ② An individual report should be prepared for each item (*18). An authorized person to sign the report should be a person who is capable of guaranteeing the contents of the report and of taking proper actions in case of emergency, including but not limited to, compensations for loss, on behalf of the supplier.
- ③ Proper codes designated by Toshiba Lighting & Technology Corp. should be filled in the columns of "Supplier code" and "Toshiba Lighting & Technology's item code."
- ④ The names of manufactures and items should be provided in the report as much as possible, since they are the key factors when re-investigations are required.
- ⑤ Names of substances must be provided in the report especially when any of target substances listed in environmental hazardous substances and/or PRTRs are used.
- ⑥ CAS No. should be provided as much as possible.
- ⑦ Control rank should be indicated by A, B, P, D/P, D or "—". A, B are showed in the Toshiba Group list of environment-related materials/substances, P, D/P, D are showed in substances regulated by GADSL on attachment: list of environmentally hazardous substances.
- ⑧ Content should be indicated by a fixed ratio or by the minimum/ maximum ratio. Total content should be between 99.999 and 101% (It is not required to make the total as 100.000%).

$$\text{Weight \% (wt.\%)} = (\text{content of the substance/weight of the parts}) \times 100$$
- ⑨ Weight should be described to three significant figures and content should be described to three significant figures or four decimal place (Even a small amount of content should be reported).
- ⑩ Purpose code should be selected from the list of use purposes.
- ⑪ Various types of plastic parts, plastic materials and pigment are made with or containing the substances that need to be reported. Careful examination is expected.
- ⑫ The report should also be submitted every time material composition, place of production or suppliers are changed.
- ⑬ The research should be based on not intentional supplementation but inclusion.

*17 : chemSHERPA® (Chemical information Sharing and Exchange under Reporting Partnership in supply chain) is a scheme for transmitting information on the chemical substances contained in products, which can be used throughout the supply chain.

*18 : "each item" means each homogeneous material.

- Homogeneous material means a material that cannot be mechanically disjointed into different materials. The term 'homogeneous' means "of uniform composition throughout". Examples of "homogeneous materials" are individual types of plastics, ceramics, metals, alloys, paper, board, resins and coatings.
- The term "mechanically disjointed" means that the materials can, in principle, be separated by mechanical actions such as unscrewing, cutting, crushing, grinding and abrasive processes.
- The basic perception of homogeneous materials conforms to Guidelines for the Joint Article Management Promotion-consortium(JAMP).

List of Use purposes

Purpose code	Use purpose
101	Main component
102	Thermal stability
103	Vulcanizing agent
104	Dyes, Pigment
105	Flame resistance
106	Machinability
107	Mechanical property
108	Tribo performance
109	Corrosion resistance

110	Electrical performance
998	Impurity (unintentional presence)
999	N /A

Attachment: List of environmentally hazardous substances

(1) Toshiba Group list of environment-related materials/substances (in products)

<Appendix 1> Rank A: Prohibited materials/substances (category)

No.	Material/substance category	Threshold of concentration to be prohibited in supplies to Toshiba Group	Reference laws and regulations
A01	Asbestos	Prohibition of intentional addition	Toshiba Group Prohibited materials/substances EU REACH Regulation (Annex XVII) JPN Industrial Safety and Health Law (Prohibition of Manufacturing)
A02	Certain azocolourants and azodyes (only those that may release certain amines)	0.003wt%(30ppm) for each generated certain Amine	Toshiba Group Prohibited materials/substances EU REACH Regulation (Annex XVII)
A03	Cadmium and cadmium compounds	0.01wt%(100 ppm) (*1, *2)	Toshiba Group Prohibited materials/substances EU RoHS Directive EU REACH Regulation (Annex XVII) EU Packaging Directive
A04	Hexavalent chromium compounds	0.1wt%(1000 ppm) (*1, *2)	Toshiba Group Prohibited materials/substances EU RoHS Directive EU REACH Regulation (Annex XVII) EU Packaging Directive
A05	Lead and lead compounds	0.1wt%(1000 ppm) (*1, *2)	Toshiba Group Prohibited materials/substances EU RoHS Directive EU REACH Regulation (Annex XVII) EU Packaging Directive
A06	Mercury and mercury compounds	0.1wt%(1000 ppm) (*1, *2)	Toshiba Group Prohibited materials/substances EU RoHS Directive EU REACH Regulation (Annex XVII) EU Packaging Directive

No.	Material/substance category	Threshold of concentration to be prohibited in supplies to Toshiba Group	Reference laws and regulations
A07	Ozone depleting substances (CFCs, HCFCs, HBFCs, carbon tetrachloride, etc.)	Prohibition of intentional addition	Toshiba Group Prohibited materials/substances EU REACH Regulation (Annex XVII) Montreal Protocol JPN Ozone Layer Protection Law
A08	Polybrominated biphenyls (PBBs)	0.1wt%(1000 ppm) (*1)	Toshiba Group Prohibited materials/substances EU RoHS Directive EU REACH Regulation (Annex XVII)
A09	Polybrominated diphenylethers (PBDEs)	Prohibition of intentional addition (only for 4-7, 10 bromine atoms), or 0.1wt% (1000 ppm) (*1)	Toshiba Group Prohibited materials/substances EU RoHS Directive EU REACH Regulation (Annex XVII) POPs Convention (Annex A) JPN CSCL (Class 1) U.S. TSCA PBT Rules(*7)
A10	Polychlorinated biphenyls (PCBs)	Prohibition of intentional addition	Toshiba Group Prohibited materials/substances EU REACH Regulation (Annex XVII) POPs Convention (Annex A) JPN CSCL (Class 1)
A11	Polychlorinated naphthalenes (more than 2 chlorine atoms) (*3)	Prohibition of intentional addition	Toshiba Group Prohibited materials/substances EU REACH Regulation (Annex XVII) POPs Convention (Annex A) JPN CSCL (Class 1)

No.	Material/substance category	Threshold of concentration to be prohibited in supplies to Toshiba Group	Reference laws and regulations
A12	Radioactive substances	74Bq/g	Toshiba Group Prohibited materials/substances EU REACH Regulation (Annex XVII) JPN Act on Prevention of Radiation Hazards due to Radioisotopes, etc JPN Nuclear Reactor Regulation Law JPN Industrial Safety and Health Law Regulation on Prevention of Ionizing Radiation Hazards
A13	Certain short chain chlorinated paraffins (with a carbon chain length of between 10 and 13)	Prohibition of intentional addition, or 1000ppm	Toshiba Group Prohibited materials/substances EU REACH Regulation (Annex XVII) POPs Convention (Annex A) JPN CSCL (Class 1)
A14	Tributyl tin (TBT) and triphenyl tin (TPT)	Prohibition of intentional addition, or 0.1wt%(1000 ppm) of tin in the part(*4)	Toshiba Group Prohibited materials/substances EU REACH Regulation (Annex XVII)
A15	Tributyl tin oxide (TBTO)	Prohibition of intentional addition, or 0.1wt%(1000 ppm) of tin in the part(*4)	Toshiba Group Prohibited materials/substances EU REACH Regulation (Annex XVII) JPN CSCL (Class 1)
A16	4-Aminodiphenyl and its salt	Prohibition of intentional addition	JPN Industrial Safety and Health Law (Prohibition of Manufacturing)
A17	1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro -exo-1,4-endo-5,8-dimethanonaphthalene (also known as Aldrin)	Prohibition of intentional addition	POPs Convention (Annex A) JPN CSCL (Class 1)

No.	Material/substance category	Threshold of concentration to be prohibited in supplies to Toshiba Group	Reference laws and regulations
A18	1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-endo-1,4-endo-5,8-dimethanonaphthalene (also known as Endrin)	Prohibition of intentional addition	POPs Convention (Annex A) JPN CSCL (Class 1)
A19	Yellow phosphorus (e.g. contained in match powder in some cases)	Prohibition of intentional addition	JPN Industrial Safety and Health Law (Prohibition of Manufacturing)
A20	Mixture of 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-4,7-methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-4,7-methano-1H-indene, and their analogous compounds (also known as Chlordane or Heptachlor)	Prohibition of intentional addition	POPs Convention (Annex A) JPN CSCL (Class 1)
A21	N,N'-ditolyl-p-phenylenediamine, N-tolyl-N'-xylyl-p-phenylenediamine or N,N'-dixylyl-p-phenylenediamine	Prohibition of intentional addition	JPN CSCL (Class 1)
A22	Dioxins	Prohibition of intentional addition	Act on Special Measures against Dioxins
A23	1,1,1-trichloro-2,2-bis(4-chlorophenyl) ethane (also known as DDT)	Prohibition of intentional addition	JPN CSCL (Class 1)
A24	1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-exo-1,4-endo-5,8-dimethano naphthalene (also known as Dieldrin)	Prohibition of intentional addition	POPs Convention (Annex A) JPN CSCL (Class 1)
A25	Polychloro-2,2-dimethyl-3-methylidenebicyclo[2.2.1]heptane (also known as Toxaphene)	Prohibition of intentional addition	POPs Convention (Annex A) JPN CSCL (Class 1)
A26	2,4,6-tri-tert-butylphenol (TTBP)	Prohibition of intentional addition	JPN CSCL (Class 1) U.S. TSCA PBT Rules(*7)

No.	Material/substance category	Threshold of concentration to be prohibited in supplies to Toshiba Group	Reference laws and regulations
A27	Beta-naphthylamine and its salt	Prohibition of intentional addition	JPN Industrial Safety and Health Law (Prohibition of Manufacturing)
A28	4-nitrodiphenyl and its salt	Prohibition of intentional addition	JPN Industrial Safety and Health Law (Prohibition of Manufacturing)
A29	Bis(chloromethyl) ether	Prohibition of intentional addition	JPN Industrial Safety and Health Law (Prohibition of Manufacturing)
A30	Hexachlorobenzene	Prohibition of intentional addition	POPs Convention (Annex A) JPN CSCL (Class 1)
A31	Benzidine and its salt	Prohibition of intentional addition	JPN Industrial Safety and Health Law (Prohibition of Manufacturing)
A32	Benzene	Prohibition of intentional addition	JPN Industrial Safety and Health Law (Prohibition of Manufacturing)
A33	2-(2H-1,2,3-benzotriazol-2-yl)-4,6-di-tert-butylphenol	Prohibition of intentional addition, or 1000ppm	Toshiba Group Prohibited materials/substances JPN CSCL (Class 1) EU REACH Regulation (Annex XVII)
A34	Dodecachloropentacyclo [5.3.0.0(2,6).0(3,9).0(4,8)] decane (also known as Mirex)	Prohibition of intentional addition	POPs Convention (Annex A) JPN CSCL (Class 1)
A35	2,2,2-trichloro-1,1-bis(4-chlorophenyl)ethanol (also known as Kelthane or Dicofol)	Prohibition of intentional addition	POPs Convention (Annex A) JPN CSCL (Class 1)
A36	Hexachlorobuta-1,3-diene (also known as Hexachlorobutadiene or HCBD)	Prohibition of intentional addition	Toshiba Group Managed materials/substances POPs Convention (Annex A) JPN CSCL (Class 1) U.S. TSCA PBT Rules(*7)

No.	Material/substance category	Threshold of concentration to be prohibited in supplies to Toshiba Group	Reference laws and regulations
A37	Perfluoro(octane-1-sulfonic acid) (also known as PFOS) or its salt	Prohibition of intentional addition, or 0.1wt%(1000 ppm) (in the case of coated material, 1 microgram/m ²)	Toshiba Group Prohibited materials/substances EU REACH Regulation (Annex XVII) POPs Convention (Annex B) JPN CSCL (Class 1)
A38	Perfluoro(octane-1-sulfonyl) fluoride (also known as PFOSF)	Prohibition of intentional addition, or 0.1wt% (1000 ppm) (in the case of coated material, 1 microgram/m ²)	Toshiba Group Prohibited materials/substances POPs Convention (Annex B) JPN CSCL (Class 1)
A39	Polychlorinated terphenyls (PCTs)	0.005wt% (50 ppm)	Toshiba Group Prohibited materials/substances EU REACH Regulation (Annex XVII)
A40	Tri-substituted organostannic compounds (excluding A14 and A15)	0.1wt% (1000 ppm) of tin in the part(*4)	Toshiba Group Prohibited materials/substances EU REACH Regulation (Annex XVII)
A41	Dimethyl fumarate (DMF)	0.00001wt% (0.1 ppm)	Toshiba Group Prohibited materials/substances EU REACH Regulation (Annex XVII)
A42	Pentachlorobenzene	Prohibition of intentional addition	POPs Convention (Annex A) JPN CSCL (Class 1)
A43	r-1,c-2,t-3,c-4,t-5,t-6-Hexachloro-cyclohexane (also known as α -Hexachlorocyclohexane)	Prohibition of intentional addition	POPs Convention (Annex A) JPN CSCL (Class 1)
A44	r-1,t-2,c-3,t-4,c-5,t-6-Hexachloro-cyclohexane (also known as β -Hexachlorocyclohexane)	Prohibition of intentional addition	POPs Convention (Annex A) JPN CSCL (Class 1)

No.	Material/substance category	Threshold of concentration to be prohibited in supplies to Toshiba Group	Reference laws and regulations
A45	r-1,c-2,t-3,c-4,c-5,t-6-Hexachloro-cyclohexane (also known as γ -Hexachlorocyclohexane or Lindane)	Prohibition of intentional addition	POPs Convention (Annex A) JPN CSCL (Class 1)
A46	Decachloropentacyclo (5.3.0.0 ^{2,6} .0 ^{3,9} .0 ^{4,8}) decane-5-one (also known as Clordecone)	Prohibition of intentional addition	POPs Convention (Annex A) JPN CSCL (Class 1)
A47	Diocyltin compounds (DOT)	0.1wt%(1000 ppm) of tin in the part (*4, *5)	Toshiba Group Prohibited materials/substances EU REACH Regulation (Annex XVII)
A48	Dibutyltin compounds (DBT)	0.1wt% (1000 ppm) of tin in the part (*4, *5)	Toshiba Group Prohibited materials/substances EU REACH Regulation (Annex XVII)
A49	6,9-Methano-2,4, 3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1, 5,5a,6,9,9a-hexahydro-, 3-oxide (also known as Benzoepin or Endosulfan)	Prohibition of intentional addition	POPs Convention (Annex A) JPN CSCL (Class 1)
A50	Hexabromocyclododecane (also known as HBCD)	Prohibition of intentional addition, or 0.01wt% (100ppm)	Toshiba Group Prohibited materials/substances POPs Convention (Annex A), JPN CSCL (Class 1)
A51	Certain polycyclic aromatic hydrocarbons (PAHs)	0.0001wt% (1ppm) 1 ppm (*5)	Toshiba Group Prohibited materials/substances EU REACH Regulation (Annex XVII)
A52	Bis (2-ethylhexyl)phthalate (DEHP)	0.1wt% (1000 ppm) (*6)	Toshiba Group Prohibited materials/substances EU RoHS Directive EU REACH Regulation (Annex XVII)

No.	Material/substance category	Threshold of concentration to be prohibited in supplies to Toshiba Group	Reference laws and regulations
A53	Dibutyl phthalate (DBP)	0.1wt% (1000 ppm) (*6)	Toshiba Group Prohibited materials/substances EU RoHS Directive EU REACH Regulation (Annex XVII)
A54	Butyl benzyl phthalate (BBP)	0.1wt% (1000 ppm) (*6)	Toshiba Group Prohibited materials/substances EU RoHS Directive, EU REACH Regulation (Annex XVII)
A55	Diisobutyl Phthalate (DIBP)	0.1wt% (1000 ppm) (*6)	Toshiba Group Prohibited materials/substances EU RoHS Directive EU REACH Regulation (Annex XVII)
A56	Phenol, isopropylated phosphate (PIP (3:1))	Prohibition of intentional addition	Toshiba Group Prohibited materials/substances U.S. TSCA PBT Rules (*7)
A57	Perfluorooctanoic acid (PFOA), its salts and related compounds	1. PFOA and its salts Prohibition of intentional addition or 0.000025wt% (25 ppb) of PFOA including its salts in an article or a mixture 2. PFOA-related compounds 0.0001wt% (1 ppm) of one or a combination of PFOA-related compounds, in an article or a mixture	Toshiba Group Prohibited materials/substances EU REACH Regulation (Annex XVII), EU POPs Regulation, JPN CSCL (Class 1)
A58	Perfluorocarboxylic acids containing C9 to C14 (C9-C14 PFCAs), their salts and C9-C14 PFCAs-related substances	1. C9-C14 PFCAs and their salts Prohibition of 0.000025 wt% (25 ppb) of C9-C14 PFCAs including their salts in an article or a mixture 2. C9-C14 PFCAs-related substances 0.000026 wt% (260 ppb) of one or a combination of C9-C14 PFCAs-related substances, in an article or a mixture	Toshiba Group Prohibited materials/substances EU REACH Regulation (Annex XVII)

No.	Material/substance category	Threshold of concentration to be prohibited in supplies to Toshiba Group	Reference laws and regulations
A59	Perfluorohexanesulfonic acid(PFHxS), its salt and PFHxS-related substance	1. PFHxS and its salts Prohibition of intentional addition or 0.0000025wt% (25 ppb) of PFHxS including its salts in an article or a mixture 2. PFHxS-related compounds 0.0001wt% (1 ppm) of one or a combination of PFHxS-related compounds, in an article or a mixture	Toshiba Group Prohibited materials/substances EU POPs Regulation, JPN CSCL (Class 1) (*8)
A 901	Pentachlorothiophenol (PCTP)	Prohibition of intentional addition	Toshiba Group Managed materials/substances U.S. TSCA PBT Rules (*7)
A 902	Greenhouse Gases(PFCs, SF6, HFCs)	Prohibition of intentional addition	Toshiba Group Managed materials/substances EU REACH Regulation (Annex XVII)
A 903	Nickel and its compounds (only parts in contact with human bodies)	Prohibition of intentional addition	Toshiba Group Managed materials/substances EU REACH Regulation (Annex XVII)
A 904	Di-Isodecyl Phthalate (DIDP)	Prohibition of intentional addition	Toshiba Group Managed materials/substances EU REACH Regulation (Annex XVII)
A 905	Di-n-hexyl Phthalate(DnHP)	Prohibition of intentional addition	Toshiba Group Managed materials/substances EU REACH Regulation (Annex XVII)
A 906	Diisononyl Phthalate(DINP)	Prohibition of intentional addition	Toshiba Group Managed materials/substances EU REACH Regulation (Annex XVII)

No.	Material/substance category	Threshold of concentration to be prohibited in supplies to Toshiba Group	Reference laws and regulations
A 907	Pentachlorophenol and its salts and esters	Prohibition of intentional addition	POPs Convention (Annex B) JPN CSCL (Class 1)
A 908	4,4'-Isopropylidenediphenol (bisphenol A)	Prohibition of intentional addition	EU REACH Regulation (Annex XVII)
A 909	Cobalt and its compounds	Prohibition of intentional addition	EU REACH Regulation (Annex XVII)
A 910	Neodymium and its compounds	Prohibition of intentional addition	EU REACH Regulation (Annex XVII)
A 911	4-Nonylphenol	0.1wt% (1000 ppm) (*)6)	EU REACH Regulation (Annex XVII)

"Intentional addition" means using chemical substances intentionally in forming supply items to bring about specific properties, appearance, or quality.

(*1)The denominator when calculating a threshold value shall be for each homogeneous material. The threshold concentration of metal compound is the mass ratio of metal element to homogeneous material. For example, in the case of cadmium and its compounds, it is the concentration of cadmium element. Only applications exempt from the EU RoHS Directive (hereinafter RoHS) shall be exempt from the prohibition (including exemption applications accepted in the future).

(*2)For packaging materials, the threshold of concentration to be prohibited shall be 0.01wt% (100 ppm) for a total of four materials (cadmium and its compounds, hexavalent chromium compounds, lead and its compounds, and mercury and its compounds) for each homogeneous material composing the package. The threshold concentration of metal compound is the mass ratio of metal element to homogeneous material. For example, in the case of cadmium and its compounds, it is the concentration of cadmium element.

(*3)Polychlorinated naphthalene with 1 or more chlorine atoms is prohibited for products destined for the EU that require compliance with EU POPs regulations. Polychlorinated naphthalene with 2 or more chlorine atoms is prohibited for products for other regions.

(*4)The numerator when calculating a threshold value shall be an equivalent for metal tin (Sn), and the denominator shall be for each molded item or its component (including mixtures only for DBT). Intentional addition for biocides and industrial wastewater treatment applications is prohibited.

(*5)The target substance groups and uses are listed in Annex XVII of the EU REACH Regulation. However, only the applications allowed for use covered by the exemptions and time limits specified in Annex XVII of the EU REACH Regulation shall be exempt from the prohibition of use.

(*6)In the case of the scope of the EU RoHS Directive, it is prohibited to contain 0.1wt% (1000 ppm) or more of each homogeneous material for each substance. In the case of the scope of the EU REACH Regulation, the total content of phthalates is prohibited from containing 0.1wt% (1000 ppm) or more of the plasticized material. The applications that are out of scope of EU RoHS Directive or EU REACH Regulation, or are exempted from EU RoHS Directive or EU REACH Regulation shall be exempt from this regulation (including exemption applications accepted in the future).

(*7)The regulations on the five persistent, bioaccumulative, and toxic (PBT) chemicals and PBT-containing products and articles in accordance with the TSCA (U.S. Toxic Substances Control Act) Section 6(h). At the moment, procurement items that are incorporated into articles whose destinations are clearly countries other than the U.S. are not subject to the regulations. In addition, among PIP (3:1), phase-in prohibitions and exemptions are excluded.

(*8) Under the CNCL PFHxS-related substances are excluded.

<Appendix 2> Prohibited substances in product safety design

Material/substance	Reference laws and regulations
Red phosphorus(*9)	Toshiba Group Prohibited materials/substances

(*9) "Red phosphorus" is used as a flame retardant for resins, but it is necessary to treat the particle surface to prevent hydrolysis (surface treatment is carried out and sold by the flame retardant manufacturer). "Untreated" red phosphorus "(hereinafter referred to as" untreated red phosphorus ") is added to the resin as a flame retardant, and the phosphoric acid generated by hydrolysis in the market is used for electrical wiring of connectors and substrates. There were many accidents that caused short circuits and heat generation in the parts. Both accidents are caused by the unintentional addition and mixing of "untreated red phosphorus".

<Appendix 3>

Toshiba Group List of Environment-Related Materials/Substances (in Products)

Rank B: Managed materials/substances (category)

No.	Material/substance category	Reference laws and regulations
B01	Antimony and its compounds	Toshiba Group Managed materials/substances JPN CSCL (Class 1)
B02	Arsenic and its compounds	Toshiba Group Managed materials/substances JPN CSCL (Class 1) JPN Industrial Safety and Health Law (Prohibition of Manufacturing) JPN Poisonous and Deleterious Substances Control Act
B03	Beryllium and its compounds	Toshiba Group Managed materials/substances JPN CSCL (Class 1) JPN Industrial Safety and Health Law (Prohibition of Manufacturing)
B04	Brominated flame retardants, other than PBBs (A08) and PBDEs (A09)	Toshiba Group Managed materials/substances
B05	Change registration to A903 (Nickel and its compounds)	-
B06	Change registration to A904 (Certain phthalates, other than A52~A54)	-
B07	Polyvinylchloride and its compounds (PVC)	Toshiba Group Managed materials/substances
B08	Selenium and its compounds	Toshiba Group Managed materials/substances JPN CSCL (Class 1) JPN Poisonous and Deleterious Substances Control Act
B09	Change registration to A902 (PFCs)	-
B10	Change registration to A902 (HFCs)	-
B11	Change registration to A902 (SF6)	-
B12	Substances of Very High Concern (SVHC) under the EU REACH Regulations (*10)	Toshiba Group Managed materials/substances EU REACH Regulation
B13	Change registration to Appendix 2 Prohibited substances in product safety design (Red phosphorus)	-

No.	Material/substance category	Reference laws and regulations
B14	Change registration to A26 (TTBP) Change registration to A36 (HCBD) Change registration to A901 (PCTP) The U.S. TSC A PBT Rules (5 substances) (excluding DecaBDE (A09) and PIP (3:1) (A56)) (*6)	-
B15	Next candidate substances for restriction under the EU RoHS Directive	-
B16	Next candidate substances for restriction under the Chemical Substances Control Law of Japan Class 1(*11)	-
B17	Per- and polyfluoroalkyl substances (PFASs) (*12)	
B91	2,2' -Methylenebis(6-tert-butyl-4-methylphenol) (*13)	

(*10) The Substances of Very High Concern (SVHC) selected under the procedures specified in Article 59 of the EU REACH Regulation. The denominator shall be the total mass of a supply item or each component/material.

(*11) The regulations on the five persistent, bioaccumulative, and toxic (PBT) chemicals and PBT-containing products and articles in accordance with the TSCA (U.S. Toxic Substances Control Act) Section 6(h). At the moment, procurement items that are incorporated into articles whose destinations are clearly countries other than the U.S. are not subject to the regulations.

(*12) Substances that have been decided to be listed as POPs in Annex A (Elimination) and Annex B (Restriction) of Stockholm Convention are included. Substances will be moved to Rank A when it is determined to be the Chemical Substances Control Law of Japan (Class1).

Reference: List of POPs in the UN Stockholm Convention

<https://chm.pops.int/TheConvention/ThePOPs/AllPOPs/tabid/2509/Default.aspx>

(*13) Submitted restrictions under consideration - ECHA (europa.eu) ;

https://echa.europa.eu/restrictions-under-consideration/-/substance-rev/72301/term*

(2) For further information of Substances of Very High Concern (SVHC), please refer to the following website.

<http://echa.europa.eu/web/guest/candidate-list-table>

(3) For further information about GADSL, please refer to the following website.

<http://www.gadsl.org>

Table of revisions

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March 1, 2003

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Edition No.	Date of establishment / revision	Reason and contents of revision
1	1999.12.1	Newly issued
2	2003.6.1	Reviewed contents and coverage of the list of environment-related materials/substances (in products)
3	2006.11.1	Reviewed and totally revised the contents of the list of environment-related materials/substances (in products)
4	2011.5.1	Totally revised by reviewing the list of environment-related materials/substances (in products) and changing the control of contained chemical substances to the JAMP
4.1	2015.2.1	Reviewed contents and coverage of the list of environment-related materials/substances (in products)
5	2018.3.1	1.Prohibited Materials/substances(category) (Annex 1, Rank A): Revised annotation (*1) and (*2) and added (*5) 2. Managed materials/substances (category) (Annex 2, Rank B): Changed annotation from (*5) to (*6)
5.1	2020.3.1	1.Revised Basic Policy for the Environment 2.Changed URL of JAMP 3.Replaced MSDSplus and AIS form as examples with chemSHERPA®
6	2021.3.1	1.Revised Toshiba Group's Basic Policy for the Environment 2. Revised the list of environment-related materials/substances (in products)

Edition No.	Date of establishment / revision	Reason and contents of revision
6.1	2021.8.1	<p>Toshiba Group Revise</p> <p>Revised the list of environment-related materials/substances (in products) and the annotations</p> <p>Toshiba Lighting & Technology Corporation Revise</p> <ul style="list-style-type: none"> • Regulation arrangement (conformity of IEC62474 DSL, JPN CSCL, etc) • A02, A47, A48: Deleted "Prohibition of intentional addition" • A12: Deleted "Prohibition of intentional addition" and set JPN Industrial Safety and Health Law Regulation on Prevention of Ionizing Radiation Hazards • Revised to rank A (B5, B6, B9, B10, B11, "Pentachlorophenol and its salts and esters" "4,4'-Isopropylidenediphenol " • Added 4.4 and attached table regarding the handling of red phosphorus
7.0	2022.6.1	<p>Toshiba Group Revise</p> <p>Revised the List of Environment-Related Materials/Substances (in Products) and the annotations</p> <p>Added Purpose of Green Procurement and Scope of Application of Green Procurement based on Toshiba Group's Environmental Future Vision 2050; organized and integrated the Green Procurement Standards and Requests in accordance with the Vision, etc.</p>
7.1	2022.10.28	<p>Toshiba Group Review</p> <p>Appendix 1 Toshiba Group Environment-related Substances List Rank A: Addition of substances to prohibited substances (group) in accordance with the revision of the law</p> <p>Toshiba Lighting and Technology Review</p> <p>Addition of 4 substances (A909 to A911 and B91) based on DSL update.</p> <p>Correction of erroneous information in Appendix Table 1: Toshiba Group Environment-related Substances List Rank A: Prohibited Substances (Group)</p>
8.0	2023.5.16	<p>Revision of "5. Requests to Suppliers." Mainly revision of the standards and notes of "5.1 Promotion of environmental management in accordance with Toshiba Group's Procurement Standards."</p>
8.1	2023.8.18	<p>Revision of the diagram "Breakdown of Greenhouse Gas Reduction Targets Toward Carbon Neutrality," revision of "<Appendix 2> Toshiba Group List of Environment-Related Materials/Substances (in Products) Rank B: Managed materials/substances (category)" (B16,B17), revision of back cover (adding notes for Basic Commitment of the Toshiba Group) etc.</p>
8.2	2024.3.1	<p>PFHxS, its salt and PFHxS-related substances (A59) added to Rank A:</p> <p>Prohibited materials/substances of List of Environment-Related Materials/Substances (in Products) (Appendix 1)</p>

Committed to People, Committed to the Future.

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"Committed to People, Committed to the Future." is the Basic Commitment of the Toshiba Group.