

Eco Mark Product Category No.140

“Containers and Packaging for Food and Beverages, Cosmetics, Household Goods Version 1.15” Certification Criteria

I. Multiple containers and packaging using plastics

Japan Environment Association
Eco Mark Office

1. Purpose of establishing criteria

Omitted

2. Applicable Scope

Multiple containers and packaging consisting of multiple parts used to maintain the quality of the content (e.g., extension of the quality retention period), where plastic container packaging is used as one or more of the components. Paper container packaging may also be used as other material. However, if the Eco Mark product category is also set on the content, such packaging is treated as an individual package of said content and thus not included in the applicable scope of this product category.

3. Terminology

Omitted

4. Certification Criteria and Certification Procedures

To show conformance to the criteria items, the Attached Certificates and related documents shall be submitted.

4-1. Environmental Common Criteria and Certification Procedures

(1) Plastics for plastic packaging and containers consisted of multiple packaging and containers shall meet any of the classifications in Table 1. However, functional parts such as splay, pump, cap, etc. may be excluded from the weight calculation of plastics. When both recycled plastics and bio-based plastics are used in one sales unit, each material may satisfy any of the classifications in Table 1.

Table 1. Percentage by weight of recycled and bio-based plastics for plastic parts

Classification	Molded product, etc.	Laminated packaging materials
Weight percentage of recycled plastics	25% or	10% or more

	more	
Weight percentage of bio-based plastics (content of bio-based synthetic polymer)	25% or more	10% or more
Total weight percentage of recycled plastics and that of bio-based plastics (content of biobased synthetic polymer)	25% or more	10% or more
Weight percentage of bio-based PET (content of biobased synthetic polymer)	10% or more	3% or more

※calculate the weight of the pre-consumer material by multiplying by 1/2

Note 1) For laminated packaging materials, any material other than plastic (an adhesive, printing ink, aluminum foil of a laminated packaging material, etc.) may be excluded from the weight calculation

Note 2) In the case of container and packaging composed of an individual package and an outer package, apply the total weight of the individual package and outer package in one sales unit as a denominator.

[Certification Procedure]

1) For recycled plastics, a certificate stating weight percentage and a raw material certificate issued by a raw material supplier shall be submitted.

2) For bio-based plastics, documents to meet all requirements in the following a) – c) shall be submitted.

a) Certificates indicating the calculated content of biobased synthetic polymers shall be submitted. For the bio-based plastic (raw resin) thereof, measurement results of the biobased synthetic polymer content calculated with the method specified in ISO 16620-3, using measurement results of the biobased carbon content and element composition by the 14C method specified in ISO 16620-2 or ASTM D6866 shall be mentioned. Should there be any deviation of 10% or higher between the measurement results and the content of biobased synthetic polymer in the standard, a description of a reason(s) therefor shall also be included. The measurement results of the biobased carbon content shall be submitted as an attached document.

In addition, for appropriate maintenance of the content of biobased synthetic polymer after certification, any of the following certificates issued by a raw resin supplier (including a dealer) shall be submitted.

- An explanatory document stating that measurements of the content of biobased carbon will be regularly carried out, and that measurement results can be disclosed as per a request of the Eco Mark Office; and

- A certificate that the Applicant has been audited or certified by a third party for management of the content of the biobased synthetic polymer.

b) Sustainability of biomass mixed into plastic as raw material shall meet the requirements of Appendix 1(a) “Sustainability checklist of bio-based plastics (raw resin)” and the supply chains of the biomass shall be identified. If the biomass material has underwent third-party audit or certification for sustainability (an international sustainability certification for plastics, etc.), the result of audit or certification may be submitted as evidence instead of Appendix 1(a). An applicant shall submit documents on the source of biomass material (a cultivation area (country, state, city, etc.), a generation process of waste and residues, etc.), a manufacturing flowchart (of raw resin) (describe the name of manufacturers of fundamental chemicals (monomers), polymers, etc.), and checklists or an evidence of a third-party audit or certification.

To the application for Eco Mark certification of products containing bio-based plastics or biomass materials that have never been certified for use, Eco Mark Office may request the applicant (or the plastic supplier) to provide information

- on the chemical composition of the products (see Appendix 1(b)).
- c) For the bio-based plastic (raw resin), results of the life cycle assessment (LCA) conducted by a third party that greenhouse gas emissions (CO₂ conversion) from raw material procurement to discarding/recycling do not increase when compared with conventional resin that is to be replaced shall be submitted (reference to the existing paper, etc. is acceptable). (An applicant shall provide the LCA result and the calculation conditions. If the applicant has undergone LCA under an international sustainability certification scheme for plastics, it may submit the data instead. The applicant may submit an academic paper published on a journal as an evidence as long as the same materials and/or manufacturing processes (sites) are mentioned in the paper as those used for the product applied for certification.)
- 3) For bio-attributed plastics, documents to meet all requirements in the following a) – c) shall be submitted.
- a) An applicant shall submit a certificate that states the attribution factor of characteristics of biomass feedstock to plastic and supportive documents (product specifications, etc.).
Manufacturers and other relevant parties in the supply chain of the plastics shall calculate and record all inputs of biomass feedstocks attributed to the plastics and their production outputs and the attribution factors throughout a year (including supportive documents) to maintain the attribution factors of biomass feedstocks at an appropriate level. An applicant shall also submit any evidence documents of third-party audit or certification (an international sustainability certification for plastics, etc.) (submit an audit report, a copy of certificate, etc.). An applicant shall retain the evidence documents for five years.
- b) Biomass mixed into plastic as raw material shall meet the requirements of Appendix 2 “Sustainability checklist of bio-attributed plastics (raw resin)” and the supply chains of the biomass shall be identified. If the biomass has undergone third-party audit or certification for sustainability (an international sustainability certification for plastics, etc.), the result of audit or certification may be submitted as evidence instead of Appendix 2. As a certification procedure, the applicant shall submit documents on the source of biomass material (a producing area, a generation process of waste and by-products, etc.), a manufacturing flowchart of plastic (describe the name of manufacturers of chemical raw materials, fundamental chemicals (monomers), polymers, etc.), and checklists or an evidence of international certificate.
- c) For the bio-attributed plastic, it shall be confirmed through life cycle assessment (LCA) that the bio-attributed plastic does not cause an increase of GHG emissions (in terms of CO₂) throughout the product life cycle in comparison with fossil-based one to replace with. As a certification procedure, the applicant shall submit the result of LCA conducted by a third-party. (An applicant shall provide the LCA result and the calculation conditions. If the applicant has undergone LCA under an international sustainability certification scheme for plastics, it may submit the data instead. The applicant may submit an academic paper published on a journal as an evidence as long as the same materials and/or manufacturing processes (sites) are mentioned in the paper as those used for the product applied for certification.)

- (2) In manufacturing the applying product, related environmental laws and regulations and pollution control agreement (hereinafter referred to as the “Environmental Laws, etc.”) must be followed with respect to air pollution, water contamination,

noise, offensive odor, and emission of hazardous materials in the area where the plant performing the final manufacturing process is located.

In addition, the state of compliance with the Environmental Laws, etc. for the last five years from the date of application (whether there is any violation) must be reported. If there is any violation, it is necessary that proper remedies and preventive measures have been already taken, and the related Environmental Laws, etc. must thereafter be followed appropriately

[Certification Procedure]

With respect to the compliance with the Environmental Laws, etc. in the area where the plant performing the final manufacturing process is located, a certificate issued by the representative of the manufacturer of the applying product or the relevant plant manager (entry or attachment of a list of names of the Environmental Laws, etc.) must be submitted.

In addition, the applicants shall report whether there is any violation in the past five years, including a violation subject to administrative punishment or administrative guidance, and if there is, the following documents in a and b must be submitted:

- a. With respect to the fact of violation, guidance documents from administrative agencies (including order of correction and warning) and copies of written answers (including those reporting causes and results of correction) to such documents (clearly indicating a series of communication);
- b. Following materials (copies of recording documents, etc.) concerning the management system for compliance with the Environmental Laws, etc. in 1)-5):
 - 1) List of the Environmental Laws, etc. related to the area where the plant is located;
 - 2) Implementation system (organizational chart with roles, etc.);
 - 3) Bylaws stipulating retention of recording documents;
 - 4) Recurrence prevention measures (future preventive measures);
 - 5) State of implementation based on recurrence prevention measures (result of checking of the state of compliance, including the result of onsite inspection).

- (3) Substances regulated by “Voluntary Regulation on Printing Ink (NL regulations)” by the Japan Printing Ink Makers Association shall not be added to printing ink used for the container and packaging as a prescription constituent.

[Certification Procedure]

Conformance to the NL regulations shall be stated in the Attached Certificate.

- (4) Plastic materials used in the containers and packaging shall not be added plastics that contain halogen in polymer backbone as a prescription constituent.

[Certification Procedure]

For plastic materials, whether any halogen element is added or not in polymeric backbone shall be stated in the Attached Certificates.

- (5) For containers and packaging for food, plastic additives such as the plasticizers, color materials, stabilizers, lubricants, etc. used in the plastic materials shall conform to the positive list system of food utensils, containers and packaging, etc.

In case of using the plastic additives which are not listed in the positive list for the products which are not intended as containers for food, the plastic additives shall meet the requirements described in ISO 8124-3, etc.

[Certification Procedures]

The Applicant shall submit certificates that such plastic additives as plasticizer, color materials, stabilizers, lubricants, etc. used in the plastic materials conform to the Positive List system of food utensils, containers and packaging, etc. With respect to plastic additives not included in the Positive List, the results of tests to show the conformance to the requirements for stipulated in ISO 8124-3, etc. shall be submitted.

- (6) For containers and packaging for food in which recycled plastics are used, the measures to ensure the safety based on “Guidelines on the use of recycled plastic in food apparatus and containers and packaging” of Ministry of Health, Labour and Welfare (Shokuan, 0427 No.2, April 27 2012), shall be taken.

[Certification Procedures]

The written document shall be submitted which shows the ensuring the safety based on “Guidelines on the use of recycled plastic in food apparatus and containers and packaging” of Ministry of Health, Labour and Welfare (Shokuan, 0427 No.2, April 27 2012).

- (7) Adhesives used in containers and packaging shall conform to “voluntary regulations on adhesives for food package materials, etc.” (NL regulations) by the Japan Adhesive Industry Association.

[Certification Procedures]

Conformance to the NL regulations shall be stated in the Attached Certificate.

- (8) The containers and packaging for food shall meet the requirement described in “the Standards and criteria for Food and Food Additives, etc. (Ministry of Health and Welfare Notice No. 370, 1959)”
Containers and packaging for anything other than food shall meet the requirement defined in the same standard criteria or ISO-8124-3, etc.

[Certification Procedures]

The Applicant shall submit test results certifying that the corresponding requirements are met.

- (9) Environment-friendly design shall be adopted so that multiple containers and packaging may be proper packaging. Specifically, the feasibility shall be examined and self-assessment shall be conducted for the items of Table 2.

Table 2. Design for Environment Checklist for Containers and Packaging

No.	Item	Check item (Example)
1	Reduction of the number of resins to be used	Is the use of resins with similar functions limited to one type? Are the resins used uniformly within the range that does not degrade the function required for containers and packaging?

2	Selection of materials with low environmental impact	Are the materials with low environmental impact selected throughout the life cycle?
3	Downsizing and thinning in containers and packaging	Is downsizing or thinning implemented by improving the shape or changing the size of the container?
4	Simplification of containers and packaging	Are the components used for multiple containers and packaging removed?
5	Efficient transport of containers and packaging	Is the design intended to improve loading efficiency during transport?
6	Ease of recycling	Is the package designed for easy separation, for example, separation of dissimilar materials without using tools? Is any material used that would interfere with ease of separation or recycling?
7	Capacity reduction	Is it possible to easily crush or fold the package for disposal?
8	Other	Are secondary materials (e.g., promotional labels, etc.) used for the container and package?

[Certification Procedures]

The checklist shall be filled out and submitted

- (10) If paper exterior package is used, the content of recycled paper pulp shall be 50% or more. If recycled paper pulp is unavailable, use of the forest certification paper is acceptable.

[Certification Procedures]

The Attached Certificate that shows the conformance to the appropriate requirements shall be submitted. Also, a raw material certificate or a certificate of forest-certification shall be attached.

- (11) In the event that the virgin pulp is used for material of multilayered packaging, the timber used for material must be harvested in legally appropriate manner consistent with the forest laws of timber producing countries. .

[Certification Procedure]

A certificate shall be submitted to prove that the timber whose legality has been verified* in accordance with "Guideline for Verification on Legality and Sustainability of Wood and Wood Products" of Forestry Agency has been in custody to be separated by the applicant or the paper manufacturer and is supplied to the applied products. At the same time, the applicant or the paper manufacturer who issues the above certificate shall submit any of the following certificates:

- 1) Certificate that the applicant or the paper manufacturer has been assessed and authenticated by the CoC (Chain of Custody) Certification System;
- 2) Certificate of the authorized company (that guarantees the association member's adequate way of supplying wood and wood products verified with

legality, etc.); and

3) Code of management practice which stipulates the way of custody to manage wood and wood products verified with legality (the method in the case that the timber verified with legality only is handled. The same applies to hereunder), retention of certificates for a predetermined period, etc.

In the event that Item 2) or 3) above is chosen and the certificate is submitted, the applicant, paper manufacturer or material supplier who issues the above-mentioned certificates shall publicly announce through its web site the code of management practice prescribed by the association concerned in the case of Item 2) and shall prescribe and publicly announce through its Web site the code of management practice concerning the scheme to assess and guarantee the system for separative management, document management for retention of certificates for a predetermined period, etc. in the case of Item 3).

*Confirm the certificate issued by the related company closest in commercial process, which at least verifies that wood and wood products they supply are with legality and under separative custody management.

4-2. Quality Criteria and Certification Procedures

(12) Quality of containers of containers and packaging shall conform to the industrial voluntary standards or the manufacturer's own standards.

[Certification Procedures]

A document to show the conformance to the appropriate standards shall be submitted.

4-3. Certification Criteria and Certification Procedures for labeling on products containing bio-attributed plastics

(13) Eco Mark shall be provided on products, packages, the website, and catalogues, etc. in accordance with the "Environmental Labeling Guidelines" (Ministry of the Environment) and the following instructions.

1) Necessary information shall be provided to make the reason for Eco Mark certification known to consumers properly.

Example: "This product has a content of bio-attributed plastics of XX percent", etc.

[Examples of unacceptable claims]

Avoid phrases that may mislead consumers into believing that the product actually contains biomass material. :

- Phrases suggesting that the product contains biomass material, for example, "Use" and "Contain" biomass material
- The content of bio-based synthetic polymer XX%
- Bio-based content XX%

2) An applicant shall assure that it does not make a claim for the content of bio-based plastics in products that are not attributed to biomass characteristics in a single product category managed under the mass balance approach.

If a single product (or a molecular structure) is consisted of a material managed

under the mass balance approach and other materials that actually contain bio-based plastics, the claims for those materials shall be made separately (not making a claim of them together)

Example 1 Manufacturing a multilayer film consisting of a bio-attributed polystyrene film and a bio-based polyethylene film.

Example 2 Manufacturing PET by using bio-based ethylene glycol and bio-attributed terephthalic acid

[Certification Procedures]

An applicant shall submit a text, etc. of environmental claims. For the instruction 2), an applicant shall submit a statement of assurance.

5. Considerations

- (1) In manufacturing products, it is desirable to consider the following, although these are not requirements for certification. The conformance to the individual criteria item shall be indicated in Attached Certificates. When a seal, etc. is used for a container and packaging, it shall be an Eco Mark certified material under category J. “Plastic materials for containers and packaging”, etc. Subsidiary materials such as seals shall be easily separated at the time of disposal.
- (2) The percentage of mixing, etc. for recycled plastic or bio-based plastic, etc. used shall be indicated.

6. Product Classification, Indication and Others

- (1) A product classification (application unit) shall be by a brand name and by classification in Table 1 of 4-1.(1).
- (2) When indicating the Eco Mark on the packaging, it should be indicated so as to clearly show that the product packaging or container is the Eco Mark certified products and also show that the product content has nothing to do with the Eco Mark
- (3) In principle, Eco Mark shall be indicated on the body of the container and packaging, etc. The licensees of Eco Mark Utilization Contract who own the Eco Mark products shall also be allowed to use the indication and the certification number as before.
Example)



エコマーク認定容器



Eco Mark Certified

(Note for the indication)

*For indicating the logo, Eco Mark certification number (eight-digit number) or the name of the licensee using the logo shall be appeared.

* Such expression as “Eco Mark product” can be used following the 2.(2) of the Guide to Eco Mark Usage.

“Eco Mark product”, “#Eco Mark”, “www.ecomark.jp”, “Eco Mark Certificate”

*In accordance with “Environmental Labeling Guidelines” of the Ministry of the Environment of Japan, etc., the environmental claims of certified products may be indicated in association with Eco Mark.

<https://www.env.go.jp/policy/hozen/green/ecolabel/guideline/>

* The Guide to Eco Mark Usage shall be followed for any cases not listed above.

<https://www.ecomark.jp/office/guideline/guide/>

November 1, 2020	Addition of A-2, I. and J.(Version1.13), Extension of Expiration
December 15, 2022	Revised (Version1.14)
February 1, 2023	Revised (Version1.15, Category K added, I, J, etc. revised)
June 30,2027	Expiration

The Certification Criteria for the Product Category will be revised when necessary.

Appendix 1(a) Sustainability checklist of **Bio-based Plastic** (Raw Resin)

No	Purpose	Request (Item that must be realized)	Subject	Realized	Implementation Method (Check off all relevant items.)
1	Prevention of global warming, conservation of the natural ecosystem	Hasn't the farm land where plants are cultivated been converted from valuable land in biodiversity or land with high carbon storage (forests, peatland, etc.) since 2008?	Farm land	<input type="checkbox"/> Not converted <input type="checkbox"/> Converted <input type="checkbox"/> Not applicable due to residues or waste	<input type="checkbox"/> Confirmed the laws and regulations concerning the land conversion for the site. <input type="checkbox"/> Gained the understanding of the actual condition of the site through on-site investigation or hearings. <input type="checkbox"/> Defined and released the guideline for procurement of plants. Alternatively, conforming to the guideline of an independent third party. - Name of the guideline: - Location of release: <input type="checkbox"/> Also using the certification system of an independent third party, regarding the procurement of plants. -Name of certification system: <input type="checkbox"/> Others (Describe specifically.):
2	Conservation of the ecosystem	If the Applicant uses the genetically modified crop as a raw material, has the Applicant assessed ensuring of safety?	Farm land	<input type="checkbox"/> Yes/ <input type="checkbox"/> No/ <input type="checkbox"/> Not applicable (GM crops Not used) <input type="checkbox"/> Not applicable due to residues or waste	<input type="checkbox"/> Confirmed the laws and regulations concerning genetically engineered crop on the site. <input type="checkbox"/> Gained the understanding of the actual condition of the site through on-site investigation or hearings. <input type="checkbox"/> Defined and released the guideline for procurement of plants. Alternatively, conforming to the guideline of an independent third party. - Name of the guideline: - Location of release: <input type="checkbox"/> Also using the certification system of an independent third party, regarding the procurement of plants.

No	Purpose	Request (Item that must be realized)	Subject	Realized	Implementation Method (Check off all relevant items.)
					-Name of certification system: <input type="checkbox"/> Others (Describe specifically.):
3	Prevention of land acidification/nutrient enrichment/water contamination	Has the Applicant gained the understanding of usage conditions of fertilizers/agricultural chemicals in the main cultivation area of plants? Isn't any agricultural chemical regulated under the "Stockholm Convention on Persistent Organic Pollutants" (POPs Treaty) used?	Farm land	<input type="checkbox"/> Yes/ <input type="checkbox"/> No <input type="checkbox"/> Not applicable due to residues or waste	<input type="checkbox"/> Confirmed the laws and regulations concerning fertilizers/agricultural chemicals on the site <input type="checkbox"/> Gained the understanding of the actual condition of the site through on-site investigation or hearings. <input type="checkbox"/> Defined and released the guideline for procurement of plants. Alternatively, conforming to the guideline of an independent third party. - Name of the guideline: - Location of release: <input type="checkbox"/> Also using the certification system of an independent third party, regarding the procurement of plants. -Name of certification system: <input type="checkbox"/> Others (Describe specifically.):
4	Appropriate water usage	Has the Applicant gained the understanding of usage conditions of water in the main cultivation area of plants?	Farm land	<input type="checkbox"/> Yes/ <input type="checkbox"/> No <input type="checkbox"/> Not applicable due to residues or waste	<input type="checkbox"/> Confirmed the laws and regulations concerning usage of water (limits on the amount of water) on the site. <input type="checkbox"/> Gained the understanding of the actual condition of the site through on-site investigation or hearings. <input type="checkbox"/> Defined and released the guideline for procurement of plants. Alternatively, conforming to the guideline of an independent third party. - Name of the guideline: - Location of release: <input type="checkbox"/> Also using the certification system of an independent

No	Purpose	Request (Item that must be realized)	Subject	Realized	Implementation Method (Check off all relevant items.)
		and pollution control agreement with respect to air pollution, water contamination, noise, vibration, offensive odor, and emission of hazardous materials?			

Appendix 1 (b) Sheet for Providing Information for Application of Products Containing New types of Bio-based Plastics or Biomass Materials

Month/Day/Year

Submit to: Eco Mark Office, Japan Environment Association

Company name: _____

Department: _____

Name: _____

E-mail: _____

1. Information on bio-based plastic used in a product applied for Eco Mark certification

Item	Description
Type of plastic (PE, etc.)	
Chemical structural formula	
Major use (molded product, fiber)	
Launch onto the market and production volume of bio-based plastic	<input type="checkbox"/> Already put on the market (<input type="checkbox"/> Japan / <input type="checkbox"/> Overseas)
	<input type="checkbox"/> Not yet (the scheduled time of launch Month/Year)
	Production volume (actual, planned or estimated) tons (Year)
Manufacturer of bio-based plastic (and the URL of website) (Describe the name of manufacturer of bio-based plastic proposed in the form in addition to the applicant)	
Fossil-based plastic to be replaced with the bio-based plastic	
Manufacturing process chart from raw material to production of plastic (Description of processes from acceptance of raw material to production of monomer and plastic, with or without of fermentation process, etc.)	May be described in an attached sheet
100-percent bio-based/ Partially bio-based	<input type="checkbox"/> 100-percent bio-based (the bio-based synthetic polymer content is 100 percent) <input type="checkbox"/> Partially bio-based -> The maximum bio-based synthetic polymer content that can be mixed into the bio-based plastic [%]
Management under the mass balance (MB) approach	<input type="checkbox"/> Plastic directly mixed with biomass / <input type="checkbox"/> MB approach *Bio-based plastics managed under the MB approach are not covered by the guidelines.
Biodegradability	<input type="checkbox"/> Yes / <input type="checkbox"/> No
Disposal after use Issues in disposal and	

recycling in comparison with fossil-based plastics to replace with (possible disposal method, etc.)	
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2. Information on biomass material

Item	Description
Type of biomass material (name of plant, etc.)	
Cultivation area (country, state, city, etc.) or the generation process of waste and residues, etc.	
Production or generation volume of biomass material	
Main use of biomass material (principal product or by-product)	
State of cultivation land (for plants, describe type of land such as peatland)	
Possible influences on biomass material if production of bio-based plastic increases in the future (Influences on other uses of the biomass, influences caused by rapid expansion of production of the biomass, etc.)	
Competing demand against foods	
Use of recycled material in production of bio-based plastic (If recycled material can be used, describe the source, collection methods, management under EU RED, etc.)	

3. Information on sustainability of biomass material

Item	Description
Sustainability certificates and initiatives of biomass material (RSPO, ISCC, etc.) and acquisition (If acquired, describe the name and detailed criteria)	
Any sustainability issues pointed out by NGOs or researchers regarding the cultivation of biomass material (If any, describe the details and the URL of website of NGOs or researchers)	
Any other concerns about the biomass material	

4. Others

Item	Description
Other bio-based plastics produced from the same biomass material (if any, describe the name of bio-based plastics)	
Others	

* Attach relevant documents such as company profile of manufacturer.

The information provided in this form will be used as reference for examination of Eco Mark certification by Eco Mark Office and relevant committees only. The Certification Committee will assess the sustainability of bio-based plastic based on the information provided in the form. The Certification Committee may conduct additional study or consult with the Evaluation Panel established under the Committee as necessary. In this case, a longer assessment period will be taken than usual.

Appendix 2 “Sustainability checklist of **bio-attributed plastics** (raw resin)”

No	Purpose	Request (Item that must be realized)	Subject	Realized	Implementation Method (Check off all relevant items.)
1	Prevention of global warming, conservation of the natural ecosystem	Hasn't the farm land where plants are cultivated been converted from valuable land in biodiversity or land with high carbon storage (forests, peatland, etc.) since 2008?	Farm land	<input type="checkbox"/> Not converted <input type="checkbox"/> Converted <input type="checkbox"/> Not applicable due to residues or waste	<input type="checkbox"/> Confirmed the laws and regulations concerning the land conversion for the site. <input type="checkbox"/> Gained the understanding of the actual condition of the site through on-site investigation or hearings. <input type="checkbox"/> Defined and released the guideline for procurement of plants. Alternatively, conforming to the guideline of an independent third party. - Name of the guideline: - Location of release: <input type="checkbox"/> Also using the certification system of an independent third party, regarding the procurement of plants. -Name of certification system: <input type="checkbox"/> Others (Describe specifically.): []
2	Conservation of the ecosystem	If the Applicant uses the genetically modified crop as a raw material, has the Applicant assessed ensuring of safety?	Farm land	<input type="checkbox"/> Yes/ <input type="checkbox"/> No/ <input type="checkbox"/> Not applicable (GM crops Not used) <input type="checkbox"/> Not applicable due to residues or waste	<input type="checkbox"/> Confirmed the laws and regulations concerning genetically engineered crop on the site. <input type="checkbox"/> Gained the understanding of the actual condition of the site through on-site investigation or hearings. <input type="checkbox"/> Defined and released the guideline for procurement of plants. Alternatively, conforming to the guideline of an independent third party. - Name of the guideline: - Location of release: <input type="checkbox"/> Also using the certification system of an independent third party, regarding the procurement of plants. -Name of certification system: <input type="checkbox"/> Others (Describe specifically.):

No	Purpose	Request (Item that must be realized)	Subject	Realized	Implementation Method (Check off all relevant items.)
					[]
3	Prevention of land acidification/nutrient enrichment, water contamination	Has the Applicant gained the understanding of usage conditions of fertilizers/agricultural chemicals in the main cultivation area of plants? Isn't any agricultural chemical regulated under the "Stockholm Convention on Persistent Organic Pollutants" (POPs Treaty) used?	Farm land	<input type="checkbox"/> Yes/ <input type="checkbox"/> No <input type="checkbox"/> Not applicable due to residues or waste	<input type="checkbox"/> Confirmed the laws and regulations concerning fertilizers/agricultural chemicals on the site <input type="checkbox"/> Gained the understanding of the actual condition of the site through on-site investigation or hearings. <input type="checkbox"/> Defined and released the guideline for procurement of plants. Alternatively, conforming to the guideline of an independent third party. - Name of the guideline: - Location of release: <input type="checkbox"/> Also using the certification system of an independent third party, regarding the procurement of plants. -Name of certification system: <input type="checkbox"/> Others (Describe specifically.): []

No	Purpose	Request (Item that must be realized)	Subject	Realized	Implementation Method (Check off all relevant items.)
4	Appropriate water usage	Has the Applicant gained the understanding of usage conditions of water in the main cultivation area of plants?	Farm land	<input type="checkbox"/> Yes/ <input type="checkbox"/> No <input type="checkbox"/> Not applicable due to residues or waste	<input type="checkbox"/> Confirmed the laws and regulations concerning usage of water (limits on the amount of water) on the site. <input type="checkbox"/> Gained the understanding of the actual condition of the site through on-site investigation or hearings. <input type="checkbox"/> Defined and released the guideline for procurement of plants. Alternatively, conforming to the guideline of an independent third party. - Name of the guideline: - Location of release: <input type="checkbox"/> Also using the certification system of an independent third party, regarding the procurement of plants. -Name of certification system: <input type="checkbox"/> Others (Describe specifically.) []
5	Use of recycled resources, avoidance of competition for food	If recycled resources are available as a part of crude raw materials of bio-attributed plastic (raw resin) on the site, did the Applicant preferentially use them?	Raw resin	<input type="checkbox"/> Yes/ <input type="checkbox"/> No/ <input type="checkbox"/> Not applicable (Not available)	Name of recycled resource in use [] Generated amount/percentage of recycled resources []
6	Prevention of global warming	Has the Applicant gained the understanding of the processing status of methane having a high global warming potential if it is generated by fermentation in the main manufacturing plant for the crude raw material?	Crude raw material manufacturing plant	<input type="checkbox"/> Yes/ <input type="checkbox"/> No <input type="checkbox"/> Not applicable	<input type="checkbox"/> Gained the understanding of the actual condition of the site through on-site investigation or hearings. <input type="checkbox"/> Others (Describe specifically.) []

No	Purpose	Request (Item that must be realized)	Subject	Realized	Implementation Method (Check off all relevant items.)
7	Utilization of non-fossil energy sources and renewable energy sources	In the course of cultivation to raw resin manufacturing, did the Applicant utilize as many non-fossil energy sources (for example, bagasse, biogas, off gas, etc.) or renewable energy sources as possible?	Manufacturing plant	<input type="checkbox"/> Yes/ <input type="checkbox"/> No	Energy name and method of utilization []
8	Legal compliance	Does the manufacturing plant of the bio-attributed plastic (monomer, raw resin) follow related environmental laws and regulations and pollution control agreement with respect to air pollution, water contamination, noise, vibration, offensive odor, and emission of hazardous materials?	Resin manufacturing plant	<input type="checkbox"/> Yes/ <input type="checkbox"/> No	Monomer manufacturer / plant name [] Resin manufacturer / plant name []

* Residues or Waste defined in Renewable Energy Directive (RED) of EU