

Appendix 2

EVALUATION CRITERIA FOR ENVIRONMENTAL REPORT CONTENT ANALYSIS

(Necessary components of environmental reporting and evaluation criteria as suggested in the MOE's Environmental Reporting Guidelines (2000))

General information on environmental reporting (given in the upper margin)

- **Securities identification code**
- **Company name**
- **Title of the report:** A simplified form of title is acceptable provided that at least the year which is covered by the report is clarified.
- **Date of issue:** May be presumed from the date of CEO's statement. If so, the expression "(CEO's statement)" should be added next to the date of issue. (If no information on the date of issue is available, ask Ms. Tachibana to make an inquiry.)
- **No. of pages:** The number of pages including the front and back covers. If a questionnaire form is attached, the number of pages of the form should be shown in parentheses. Example: 62 (+2)
A greeting letter should not be counted.
- **Brochure/Website**
: Tick whichever applies.
If just a summary is given in the brochure and detailed information is given on the website, tick both and write as follows: brochure (summary) / website (details)
- **Analyst:** name of the person who made an analysis.
- **Date:** Date when the analysis was made.
- **Version of evaluation criteria:** Version number of the evaluation criteria used for the analysis. If the present criteria were used, write V.0215.

Parameters of Analysis (Topics)

- Hereinafter, the Check column refers to the column in the check sheet (CS) which is marked with the word "Check." Therefore, "(Total):" (as seen, for example, in (13) a. "Input of materials") and the Remarks column are not included in the Check column.
- If more detailed information is given on the website than in the brochure and your judgment entered in the Check column is based on the information from the website, write, for example, (HP), in an appropriate space.

1. Basic Headings

If you analyze an environmental report available on the website, you should only refer to pages concerning environmental issues.

(1) CEO's statement:

If there is a statement from the president or the director in charge of environmental issues, put a circle (○) in the Check column, which means that the information given in the report is acceptable or appropriate. If there is only a greeting from the environmental conservation committee, put a cross (×), which means that the given information is unacceptable or inappropriate.

(2) Foundations of reporting:

If there is information on at least either of the covered range and the covered time period, put a circle. Here, fields, division in charge of publication and contacts are irrelevant.

What should be written in the Remarks column for topic (2):

- Is there information about whether or not domestic affiliates are covered?

(○ if yes or × if no)

If no specific name is given and there is only an expression such as "including some affiliates, mark a cross.

If it is stated that no affiliates are covered, mark a circle.

Examples:

- for an expression such as "all the consolidated companies"
- for an expression such as "only the company under consideration"
- for an expression such as "(a company name)"
- △ for an expression such as "(a company name) and other affiliates (unnamed)"
- × for an expression such as "some of the affiliates (unnamed)"
- × for a case that the names of affiliates are given in a topics section or the like but there is no reference to the coverage in the space where the covered organization is to be indicated.

- Is there information about whether or not overseas operations and affiliates are covered?

(○ if yes or × if no)

Put a cross for an expression such as "including overseas operations..."; put a circle for an expression such as "not including overseas operations and affiliates."

Examples:

- for an expression such as “domestic operations only”
- for a case that all business sites are listed in the space dedicated to the coverage information and obviously there are no overseas operations or affiliates.
- for an expression such as “including all overseas operations and consolidated subsidiaries”
- △ for an expression such as “(company name) and other overseas operations and affiliates (unnamed)”
- × for an expression such as “some of the overseas affiliates (unnamed)”
- × for a case that the names of affiliates are given in a topics section or the like but there is no reference to the coverage in the space where the covered organization is to be indicated.

- **Covered period:** the period covered by the report should be concretely described. If it is presumed from CEO’s statement, etc, then you should indicate so by such an expression as “(presumed from CEO’s statement).” If the covered period information is included only in an environmental accounting report, you should indicate so by “(EA)”.

(3) Summary of the nature of the business:

If some information on the nature of the business is included, put a circle regardless of the content.

What should be written in the Remarks column for topic (3):

- Is there an indication of the line of business covered by the report?

(○ if yes or × if no)

Check whether there is information about which line of business is covered by the report. Here, any presumption from the report is irrelevant.

Put a circle for an expression such as “... and some of the other lines of businesses are also covered.”

2. Summary of Policies, Targets, and Achievements in Environmental Conservation

(4) Business policies and posture regarding environmental conservation:

Acceptable if an environmental concept, charter or policy is indicated.

(5) Summary of policies, targets, and achievements in environmental conservation:

Circle any item (a to c) on which information is given. Put a circle in the Check column if there is information on at least one of items a to c.

a. A list of targets for the current year (in a tabular form)

b. A list of achievements made in the current year

(For a and b, a list of targets or achievements for several years including the current year is acceptable.)

c. A list of targets for the next year or mid-and-long term targets

- If a list of achievements (table) includes major environmental impact data for all business activities, put a circle for topics (5) and (12) (both numerical and descriptive data).

(6) Summary of environmental accounting information:

Environmental cost information (numerical)

(Acceptable even if there is only accumulative investment data or expenditure data; unacceptable if there is just an expression such as “have a plan to introduce.”)

Indicate in the Remarks column whether or not the guidelines for environmental accounting used are shown.

If data on reduction of environmentally hazardous substances is shown in the “Effect” section of the report, it should be counted as data for these substances.

3. State of Environmental Management

(7) State of environmental management system

a. Organization: Acceptable if an environmental conservation organization chart is included. Also acceptable if descriptive information is concrete enough for a reader to understand the organization easily.

b. ISO 14001: Acceptable if there is a description which indicates acquisition of ISO 14001 certification or the establishment of a PDCA cycle system. Unacceptable if it is described only in CEO's statement. If acquisition of ISO 14001 certification by an affiliate only is stated, the judgment depends on whether or not the affiliate is covered by the report. Unacceptable if it is stated only in CEO's statement.

c. Environmental auditing:

Acceptable if it is apparent that internal auditing has been done. Here, environmental auditing includes RC auditing but not environmental impact investigation and surveillance by an ISO certification organ, etc. Unacceptable if reference to environmental auditing is made only in CEO's statement or a description of environmental policies. Acceptable if there is a description implying that training of internal environmental auditors is underway.

d: Environmental risk management:

Acceptable if there is reference to emergency response and the establishment of a yellow card system (material safety data sheets are not counted). Should not be judged as acceptable if there is only the term "risk management." Acceptable if reference is made to fire drills for plants or other facilities.

e. Environmental education:

Acceptable if it is apparent that environmental education is underway. Unacceptable if there is reference to environmental education only in CEO's statement or a description of environmental policies. Here, environmental education is limited to in-house environmental education. Environmental education for people outside the company should be considered as relevant to topics (9) and (11).

(8) State of research and development of technologies for environmental conservation and environment-conscious products/services (Design for the Environment (DfE))

Attention should be paid to efforts for environmental friendliness in the stages of R&D, design and manufacture. Importance should be placed on originality in technological development by an individual company. Topic (8) concerns environment-conscious products under development while topic (16) concerns environment-conscious products available on the market. Reference to LCA (life-cycle assessment) is appropriate if it is related to DfE.

Examples:

Acceptable if there is an expression such as "under development" or "(they are) developing."

The requirement under topic (16) is also met if the requirement under this topic (8) is met and products and services are on the market.

Acceptable if technological development for production processes not directly associated with products is based on original R&D. The same information may be used for judgment concerning topics (8) and (16).

(9) State of disclosure of environmental information and environmental communication

Acceptable if there is reference to or a questionnaire concerning disclosure of environmental information. Factory tours are relevant here. Meetings with local residents for explanation of business activities are relevant here but other types of meetings should be considered as relevant to topic (11).

Not acceptable if in connection with this topic they just mention their publication of environmental reports.

(10) State of compliance with environmental regulations

Acceptable if there is disclosure of environmental damage or reference to either of accidents, complaints and compliance with environmental regulations or rules. Acceptable if such an expression as “there was no environmental accident” or “(they) comply with environmental laws or regulations.”

Acceptable if there is disclosure as to whether any of their environmental performance data complies with regulations. Acceptable, for example, if both pollutant emissions from a factory and control limits are shown. Not acceptable if it is just stated that the ratio of green space meets a legal benchmark.

(11) State of social contribution related to environment

“Social contribution related to environment” here refers to environmental activities which are not directly connected with business activities, such as activities for communication with local residents.

4. State of Activities for Reduction of Environmental Burdens

For the following topics (12) through (19), put a circle for N (numerical data) if total amounts or amounts of reduction are indicated. Percentage data is also acceptable as numerical data.

If total amount data is not shown but a ratio with respect to the benchmark year is shown, it is accepted as numerical data.

For a topic or subtopic on which judgment should be made for both N and D, if given data is acceptable as numerical data (N), it should also be accepted as descriptive data (D).

(12) A complete picture of environmental burdens (Perception and valuation of whole life cycle of operation)

Material flow chart

a: Chart

b: N (numerical data)

- Acceptable for Chart and unacceptable for N if there is no chart but a numerical data table.
- Unacceptable if there is a flow chart concerning wastes only.

(13) State of environmental burdens from material/energy input, and mitigation measures

Put a circle in the Check column if there is numerical data concerning factories, etc.

For the following subtopics a through f, put a circle for N if some numerical data is given (regardless of measuring unit); put a circle for D if some descriptive data is given.

Generally, if given data is acceptable as numerical data, it should also be accepted as descriptive data. Put a circle for both N and D even if mass balance data (material flow chart) only includes quantitative data.

Graphs should be considered as numerical data.

Basically, this topic is irrelevant to non-manufacturing companies. For companies engaged in commerce or the like, put a circle if quantitative data on input of materials for their original products is given.

a. Total input of materials and measures for its reduction

- Manufacturing companies:

Unacceptable (put a cross) if quantitative data on input of materials for the main line of business is not given. Acceptable (put a circle) if some performance data for the main line of business is given.

Leave the Check column blank if materials of products are not specified. (Put a circle if the amounts of input of main materials of products are stated.)

Unacceptable if there is only an expression from which the relation between products and materials cannot be assumed: for example, "(chemical substance name)...t". (Leave the space for D blank.)

Put a circle next to "Total" if it is assumed that given performance data concerning the main business to be covered activity concerns the entire main business.

Put a circle next to "Total" if it is assumed that data on main business sites and factories is given, and so on.

Put a circle if there is data on all the companies in the group including affiliates.

- Financial companies:

Acceptable if the amount of paper used is given.

b. Sustainable use of materials within a business and measures for its increase

- Note that data under this subtopic should be related to input. Acceptable if internal zero emissions are realized but unacceptable if outside specialists deal with wastes, etc.

Acceptable if used materials are recycled for input within the group or industry (e.g. recycling rate of used paper in the paper manufacturing industry).

Recycling of products is irrelevant here (it is relevant to topic (15) f to j and topic (16)). Recycling of waste which is not the company's own output is irrelevant (it is also irrelevant to topics (15) and (16)).

Acceptable if recycled materials are used for the company's own products (e.g. malt feed, fertilizers, roadbed materials).

- Excavated soil in gas piping work is irrelevant here.

Note: According to the MOE's Guidelines, subtopic b is a special note to subtopic a. In principle, therefore, only when given data for subtopic a is acceptable, there should be data related to subtopic b. The same relation exists between subtopics c and d, and between e and f.

c. Energy consumption and measures for its reduction

- Put a circle for N if there is some performance data for the main line of business. Put a circle next to "Total" if given performance data concerns the entire business to be covered.
- If data on CO₂ emissions is only given and treated as energy consumption data, put a circle for both this subtopic and (15)-a.
- If there is reference to CO₂ emissions but not to energy consumption, put a circle only for (15)-a.
- Put a circle for N if an energy provider shows data on power transmission loss, etc. (put a cross next to "Total" if only power transmission loss data is given). (Write in the Remarks column only when a circle is put next to "Total".)
- In the Remarks column, list all energy measuring units used in a general description of the company's overall energy consumption. (This is meant to see whether J (joules) was used in totaling all energy inputs for their business. If no totaling was done, list all energy measuring units used in a general description. Energy

consumption data for a certain business site as additional or extra information is irrelevant.)

- If unacceptable, mark “graphs only,” “(consumption or emission) per unit of output” or “trends (increase/decrease) only” if applicable.
- Put a circle in the Check column if proper numerical data is given. (Leave the Check column blank if raw data on energy consumption is given.) In addition, if the numerical data indicates actual energy consumption or greenhouse effect gas emissions, marking in the Remarks column is unnecessary.
- If numerical data represents consumption or emission per unit of product/service output, mark the choice “(consumption or emission) per unit of output only”.
- If increase or decrease from the base year or data as compared with the previous year is only indicated, mark the choice “trends (increase/decrease) only.”
- If graphs are given without any numerical data, mark the choice “graphs only”.
- If numerical data is given on a per-unit basis in a graph which uses data expressed as consumption or emission per unit of output, mark not the choice “graphs only” but the choice “(consumption or emission) per unit of output only”

d. Renewable energy consumption and measures for its increase

- Green purchase of electric power is relevant here. Cogeneration is irrelevant.
- Put a circle for N if numerical data (electricity generated, etc) is given for a business site.
- Put a circle if an energy provider discloses renewable energy generated.
- A description of hydraulic power generation which was made by an electric power company is irrelevant. Acceptable if they have their own facility for natural energy generation such as solar energy generation and wind power generation.

e. Amount of water used and measures for its reduction

Put a circle next to “Total” if given performance data concerns the entire business to be covered.

f. Amount of sustainable use of water within a business and measures for its increase

(14) State of environmental burdens at the upstream (purchase of products/services), and mitigation measures

- Put a circle if it is apparently stated that the company is promoting green purchase. Unacceptable if there is reference to green purchase only in CEO’s statement or a

description of environmental policies.

- Acceptable if a company engaged in commerce deals in eco-friendly products (purchased from other suppliers).
- Acceptable if a company in the paper & pulp industry made reference to a forest certification system.

(15) State of environmental burdens from output of refuses, and mitigation measures

For the following subtopics a through j, put a circle for N if some numerical data (absolute data, indices, improvement ratios, etc) is given (regardless of measuring unit); put a circle for D if some descriptive data on countermeasures is given.

(Here, LCA information on products is irrelevant.)

a. Greenhouse effect gas emissions and measures for their reduction

In the Remarks column, indicate the unit of performance measurement used (to check if it is t-CO₂ or t-C).

If unacceptable, mark “graphs only,” “(consumption or emission) per unit of output” or “trends (increase/decrease) only” if applicable. (Leave the Check column blank if raw data is given.)

- Greenhouse effect gas emission ratios among departments are not considered as numerical data.

b. Amount of ozone depleting substances released and measures for its reduction

Here, ozone depleting substances include CFC, halon, HCFC, and 1-1-1-trichloroethane. If their use is totally abolished, the amount is considered as zero. (Put a circle for N.) PRTR data is relevant. Put a circle for N if this data is given only in a PRTR numerical data table. Put a circle for N if data on recovery and storage of ozone depleting substances related to business activities is given.

c. Air contaminants (SO_x, NO_x, dust) and measures for their reduction

d. Volume of drainage and measures for its reduction

Put a circle for N if performance data concerning the main business is given. Put a circle next to “Total” if the given performance data concerns the entire business to be covered.

e. Water contaminants

Acceptable if numerical and/or descriptive data on BOD, COD, nitrogen or phosphor is given.

f. Total amount of wastes and measures for its reduction

- Wastes include recyclable resources.

If a description of wastes includes reference to measures concerning any of subtopics f through j, it is acceptable.

Put a circle for N if there is some performance data concerning the main business.

Put a circle next to "Total" if the given performance data concerns the entire business to be covered.

Here, a main business refers to a core business for a diversified company and main business data refers to environmental performance data for the core business.

Put a circle if there is data referred to as the amount of wastes generated.

<In case of a manufacturer>

- Acceptable if there is at least some factory data concerning this subtopic.

- Unacceptable if there is only office data concerning this subtopic.

<In case of a company for which environmental performance at their office is important>

- Acceptable if there is some office data concerning this subtopic.

<In case of a transportation business>

- Environmental performance data relating to transportation is important.

If a company which is supposed to generate industrial waste discloses only data on general waste, put a cross for N and mark either choice (industrial waste or general waste) as appropriate in the Remarks column.

g. Amount of recyclable resources reused/recycled and measures for its increase

- The amount of recycle or the amount of reuse which is included in the data on the amount of wastes produced is relevant to this subtopic. Data given as the amount of effective use is irrelevant (also irrelevant to topic (15) h, i and j).

- Acceptable if there are data on the amount of wastes produced (emissions) and recycling rate data.

- Acceptable if a company makes solid fuel (RDF) from their waste but does not seem to use it. (If they themselves use the solid fuel, put a circle for subtopic h.)

The reuse or recycle of wastes produced outside the company or by other companies is basically irrelevant here.

- Reuse or recycle by an outside specialist (on consignment) is relevant.

- Unacceptable if a company states that they make solid fuel from their waste but does not seem to use it.

h. Amount of recyclable resources thermally recycled and measures for its increase

- Only resources thermally recycled within a company are relevant here. This data is irrelevant to (13) d.

i. Amount of wastes incinerated and measures for its reduction

- Acceptable for construction companies but unacceptable for other companies if the amount of reduction is indicated.

j. Amount of final disposal of wastes and measures for its reduction

k. Amount of PRTR substances and measures for its reduction

- Put a circle for N if there is numerical data on at least a specific PRTR substance.
- Put a cross for N if there is only data on total amounts of PRTR substances.
- Put a cross for D as well if a company just states that they have a plan to introduce reduction measures.
- If a company states that they do not deal with any PRTR substance, the amount should be considered zero; put a circle for N.

l. Numerical data and description of dioxin

Acceptable if there is numerical or descriptive data on dioxin in any form. Acceptable if there is dioxin data in data on emissions of environmentally hazardous substances for each business site or PRTR data disclosure. Also acceptable if there is a description concerning reduction in the use of polyvinyl chloride. Put a circle for both N and D if there is a description suggesting that the incinerator was abolished.

(16) State of environmental burdens at the downstream (providing products/services), and mitigation measures

- Acceptable if there is no reference to environmental burdens at the downstream but there is a description of activity for reducing them.
- Development of eco-friendly products is desirable (also desirable for topic (8)).
Acceptable if there is a description of eco-friendly measures taken after shipments of products such as recycling of products, containers and packing materials.
Acceptable if eco-friendly products have been developed and commercialized.

- Collection of recycled products such as TV sets and air conditioners by a manufacturer is among mitigation measures.
- Reuse or recycle of a company's own products from customers or outside the company is among mitigation measures.
- For a company engaged in commerce, the utilization ratio of recycled paper or collection of bottles, cans, PET bottles and plastic trays through recycle boxes installed in stores is relevant to this topic (this contributes to improvement in the recycling rate of their own products).

(17) State of environmental burdens from transportation, and mitigation measures

- Put a circle for N if there is numerical data on environmental burdens related to transportation; put a circle for D if there is a description of any mitigation measure.
- Put a circle for N if there is data on the number of low-pollution cars introduced (NG vehicles, electric vehicles, etc).
- Put a circle for N if there is numerical data concerning rail cargo or ship cargo transportation.

(18) State of environmental burdens from cumulative soil contamination, land utilization and other environmental risks, and mitigation measures

- Acceptable if a company describes their soil contamination.
- Reference to noise nuisance, smell, vibration or the like is irrelevant.
- Acceptable if there is reference to treatment of PCB or a process to make it pollution-free.

(19) Third party statements

Check whether there is a third party statement corresponding to each of the following:

- Results of reviews by audit corporations, ISO certifying organizations, etc.
- Opinions of experts, etc.

Reference Data (GRI elements)

Economic Performance

- Wage, labor productivity, job creation, contributions to charitable work, etc.
- Acceptable for both this element and topic (11) if a company has made a contribution. General financial data and data on human capital investment (outsourcing, R&D, training, etc) are irrelevant here.

Social Performance

- Occupational safety and health, employee retention, right to work, human rights, wage, outsourcing working conditions, anti-discrimination measures for minorities, customer satisfaction, etc.
- Social performance data in an RC report should be appropriate here.
- General local community activities which are not related to the abovementioned are irrelevant here.

What should be written in the lower margin

Self-declaration about the guidelines in accordance with which a company compiled their environmental report.

If there is reference to guidelines in the environmental report, choose the items in the check sheet relating to the guidelines and indicate the corresponding pages in the report.