# Fiscal 2007 Environmental Technology Verification Pilot Program Implementation Guidelines

#### April 2007

### Ministry of the Environment, Japan

First Edition: June 2003

Second Edition: May 2004

Third Edition: April 2005

Fourth Edition: March 2006

Fifth Edition: 2007

## **Preface: Overall Regulations**

#### 1. Objectives

The objectives of the Environmental Technology Verification (ETV) Pilot Program (hereinafter "Pilot Program") are to establish methodologies and systems for the verification of environmental technologies, to promote the spread of those technologies, and to contribute to the advancement of environmental protection and environmental industries. These objectives are achieved through the implementation of pilot projects involving objective, third-party verification of the environmental protection effects and other features of innovative environmental technologies that are already available, but are not yet widely used due to the lack of objective assessments their of environmental protection effects, etc.

#### 2. Definition of "Verification"

Under the Pilot Program, "verification" means the process by which third parties, who are neither developers nor users of the environmental technologies, indicate objective data based on testing, etc., of the environmental protection effects of environmental technologies, as well as their secondary environmental impacts and other important aspects of performance from the environmental perspective (collectively referred to hereinafter as "environmental protection effects").

"Verification" differs from "certification," whereby certain evaluation standards are established and then compliance is judged based on those standards.

#### 3. Basic Stance on Cost-Sharing, etc.

Under the Pilot Program, until a verification system is established, no fees will be collected, and the national government will cover the majority of costs (hereinafter "government-sponsored system"). However, in the interest of burden-sharing with beneficiaries, generally by the end of two years from the start of verification in each technological field, this will shift to a system called "fee-based system", that means, the Verification Applicant has to pay fees of the Pilot Program. In these Implementation Guidelines, that is, the implementation methods will be specified in two separate categories: a government-sponsored system (Section 1), and a fee-based system (Section 2).

In order to maximize the benefits of technology verification under this Pilot Program, the Ministry of the Environment (hereinafter "MOE") will actively consider utilization of data on these performances and the other aspects of technologies for which verification has been completed under programs besides this Pilot Program.

The technology categories that will be covered in fiscal 2007 under each system are as follows.

Government-sponsored system: Technology categories started in or after fiscal 2006 (excluding the technology categories for water environment improvement in closed sea areas, VOC treatment (VOC treatment for medium and small companies, and heat island control (technology for reducing air-conditioning load by the exterior of buildings))

Fee-based system: Technology categories started in fiscal 2003 and 2004 (excluding the technology categories for "government-sponsored system" above).

#### 4. Special Measures relating to Implementation Methods

When shifting from the government-sponsored system to the fee-based system, in case there are unresolved issues, for the program implementation in the said technology categories, MOE may give priority to the resolution of those issues irrespective of the provisions of Section 2. However, even then, rather than continuing the system of Section 1, an effort shall be made to establish a fee-based system as soon as possible, such as by conducting at least the minimum confirmation tests based on the advice of the Advisory Committee of the Pilot Program and Working Groups.

#### 5. Basic Stance on Disclosure of Information

Under the Pilot Program, MOE and the other participated organizations ensure disclosure of information via various media, and work to promote the Pilot Program through a variety of events as well.

MOE, particularly, keeps collecting information on similar programs of environmental technology certification or recognition etc., by public institutions inside and outside MOE, and work to present information properly to the people on a portal site. As for similar overseas programs, MOE shall work to exchange information each other and present information on the website as well.

# Section 1: Implementation by Government-Sponsored Approach

#### Chapter 1: Institutional Arrangements for Implementation of Pilot Program

#### 1. Ministry of the Environment

MOE shall select target technology categories for verification, conduct technical development of testing methodologies, prepare Verification Testing Guidelines, select Verification Organizations, and publish verification testing results and related information from databases, as well as operate and manage the overall Pilot Program, and conduct comprehensive discussions about verification methodologies and the establishment of institutional arrangements for verification.

#### 2. Advisory Committee of the Environmental Technology Verification Pilot Program

The Advisory Committee of the Environmental Technology Verification Pilot Program (hereinafter "Advisory Committee of the Pilot Program"), established on request of the Director of General Environmental Policy Bureau of the MOE, shall discuss and provide advice based on expert opinion, regarding basic matters relating to implementation of the Pilot Program, including the tasks conducted by the said Ministry.

#### 3. Working Groups

The working groups (hereinafter "Working Groups") established by MOE (i.e., by its departments and bureaus) in each target of technological field, shall discuss and provide advice based on expert opinion in each category, regarding matters handled by the said Ministry, including the preparation of Verification Testing Guidelines, and the selection of Verification Organizations. The Working Groups shall consist of persons who are knowledgeable on these matters (academic experts, representatives of technology users, etc.). In principle, the conduct of the Working Group activities shall be open to the public. In addition, Working Groups shall assist Advisory Committee of the Pilot Program, with their exclusive knowledge.

When appropriate, a number of target technology categories may be bundled into one Working Group. In addition, in order to develop more effective systems, the enlarged-Working Group (stakeholders' conference) shall be held when needed. As for selection procedures of Verification Organizations and Working Groups, it is permitted to be undisclosed in terms of maintenance of trade secrecy.

#### 4. Verification Organizations

Verification Organizations shall issue open invitations for target verification technologies from corporations and other entities; select technologies to be targeted for verification; prepare Verification Testing Plans as required; verify technologies (implement verification testing), prepare Reports of Verification Test Results, and provide Reports of Verification Test Results to MOE. Multiple Verification Organizations may be established in each technological field, to the extent permitted by budgets.

#### 5. Technology Verification Committee

A Technology Verification Committee, established by the Verification Organizations, shall discuss and provide advice based on expert opinion, regarding matters relating to implementation of tasks conducted by the Verification Organizations. The said Committee

shall consist of persons who are knowledgeable on these matters (academic experts, representatives of technology users, etc.).

#### 6. Institute for development of the technology relevant to verification tests

MOE shall subcontract technology development of verification testing methodologies to an appropriate institute when there is no relevant verification test method on a certain verification item.

#### Chapter 2: Selection of Target Technology Categories

- 1. MOE shall select technology categories to become the targets of the Verification Pilot Program based on the discussions of the Advisory Committee of the Pilot Program and the Working Groups, while keeping in mind the following considerations:
- (1) Technology categories for which a need exists for verification, from the perspective of developers and users (local governments, consumers, etc.)
- (2) Technology categories for which technology verification would be effective in spreading and promoting the technologies
- (3) Technology categories for which technology certification or recognition is not yet being implemented under other programs
- (4) Technology categories for which verification is feasible

Technology categories for which verification is feasible, from the perspective of institutional arrangements for implementation, etc.

Technology categories for which it is feasible to establish Verification Testing Guidelines

- (5) Categories for which utilization of information relating to the said technology categories would facilitate government administration (from the national perspective) of environmental affairs
- 2. MOE may temporarily, or on an ongoing basis, halt or eliminate a target of technological field, after obtaining advice from the Advisory Committee of the Pilot Program where necessary, in the event that a previously-selected target of technological field has become inappropriate for practical reasons; for example, when verification has become inappropriate in view of the considerations presented in paragraph 1. above, or when it is thought that few responses are likely come from open invitations for target technologies. However, in cases where a target of technological field has been halted or eliminated, the notice of halt or elimination and its reasons shall be made public.
- 3. MOE, as required, may choose to continue with the same target technology categories in fiscal 2007 and thereafter, based on discussions of the Working Groups regarding the technology categories targeted in fiscal 2006, and after reviewing the institutional arrangements for implementation of Verification Testing Guidelines, etc.

#### Chapter 3: Establishment of Verification Testing Guidelines

1. MOE shall establish Verification Testing Guidelines for each target of technological field, with reference to the "Components of Verification Testing Guidelines" (Annex 1) and based on consideration of the discussions of the Working Groups. Verification Testing Guidelines shall be revised, as required, based on results of verification testing and on consideration of scientific and technological progress.

Note: It is not necessary to consider "fee categories" referred in Annex 1 for the relevant technology categories in Section 1, because they relate only to Section 2 of these Guidelines.

2. Where no suitable methodologies exist for verification testing of a certain verification parameter, MOE may request the Institute for development of the technology relevant to verification tests to develop techniques for implementation of verification testing.

#### Chapter 4: Selection of Verification Organizations

#### 1. Procedures for the Selection of Verification Organizations

- (1) After discussions in Working Groups for each target of technological field, MOE may invite local governments or legal entities (public corporations) or specified nonprofit organizations established under article 34 of Japan's Civil Code to apply to become Verification Organizations. Meanwhile, in case of inviting organizations, etc. above, MOE shall serve as the Verification Organization, based on the premise that the participation of related organizations shall never be prevented.
- (2) An organization desiring to become a Verification Organization shall submit to MOE an application form specified by the Ministry, together with the relevant documentation relating to the verification arrangements, etc., including any administrative functions that it may intend to commission externally.
- (3) On receipt of applications indicated under (2), MOE shall select Verification Organizations, keeping within the budget available, while referring to the considerations stated in paragraph 2 and to the discussions of the Working Groups. The results of selection of Verification Organizations shall be reported to the Advisory Committee of the Pilot Program.
- (4) MOE shall enter into commissioning or contract agreements with Verification Organizations selected in (3), and the Verification Organizations shall conduct verifications in accordance with the provisions of chapter 7, section 1.

Note: In case the organization that has participated in this project as a Verification Organization by last FY wishes to continue being the Verification Organization of same target of technological field, instead of step (2) above, the organization shall be accepted to inform MOE accordingly in writing during the application period presented in (1). MOE, in case of being notified, can continue to choose the organization as the Verification Organization, to the extent permitted by budgets, without step (3) above.

#### 2. Considerations for Selection of Verification Organizations

In selecting Verification Organizations, after clarifying the requirements for Verification Organizations, document reviews and interviews where necessary shall be conducted with consideration of the following points.

#### (1) Institutional Arrangements

- Does the applicant have adequate institutional capacity and personnel to fulfill the functions of a Verification Organization?
- Are specific task allocation and accountability arrangements clearly defined between organizations?
- Does the applicant have quality control systems in place that comply with standards such as JISQ9001: 2000 (ISO9001:2000) "Quality Management Systems: Valid Requirements," and JISQ17025:2000 (ISO/IEC1705) "General Requirements for the Competence of Testing and Calibration Laboratories"?
- Does the applicant document the quality control systems that has established?
- Does the applicant conduct regular internal audits?
- Does the applicant maintain records relating to verification tasks?

#### (2) Technical Capacity

• Does the applicant have an adequate track record in its technology categories?

Note: For a newly-established organization, does the applicant have personnel who possess an adequate track record in the organization's technology categories?

• Does the applicant possess personnel and testing facilities with adequate technical capacity to implement verification testing? (This does not preclude implementation by external organizations, based on subcontracts or contract agreements, etc., where necessary, for a portion of the verification testing.)

Note: Regarding an organization that does not possess its own testing and research organization, is it clear that the organization would be capable of fulfilling its role as a Verification Organization through association with an organization that does possess adequate institutional and technical capacity, in terms of the perspectives stated in (1) and (2) above.

#### (3) Assurance of Fairness

- Is there any concern that information and treatment will differ depending on the Verification Applicant, in terms of procedures for selection of verification target technology and conduct of verification testing, etc.?
- Is there any concern about procedures to ensure confidentiality of technical information, etc., obtained through verification tasks will differ depending on the Verification Applicant?

#### (4) Assurance of Impartiality

- Is there any concern about obstacles to impartial implementation of verification testing, caused by advice or other conduct favoring any particular Verification Applicant?
- Is there any concern that special interests, such as with a particular Verification Applicant, will affect procedures for selection of verification target technologies and conduct of verification testing, etc.?
- Does the applicant implement proper handling, record-keeping and rectification measures,

with regard to disputes or complaints, etc., from Verification Applicants?

#### (5) Fiscal Basis

- Does the applicant have an adequate fiscal basis and financial independence to fulfill the functions of Verification Organization?
- Does the applicant conduct regular accounting audits?

#### Chapter 5: Selection of Target Technologies for Verification

#### 1. Procedures for the Selection of Target Technologies

- (1) The Verification Organization shall issue a separate open invitation for target technologies for each target of technological field. A party that wishes to receive technology verification (a developer, vendor, etc.; hereinafter "Verification Applicant") shall submit an application to the Verification Organization.
- (2) The Verification Applicant shall complete the verification application, providing the required information, and submit the application along with the specified documents. The contents of the verification application shall be as stipulated in Verification Testing Guidelines.
- (3) The Verification Organization shall select the target technologies from among the technologies for which applications were received, referring to the considerations in paragraph 2 and based on consideration of discussions of the Technology Verification Committee and other factors, and obtain approval from MOE. In the interest of avoiding duplication in implementation of the budget, in cases where MOE finds that more than one application has been made to Verification Organizations for what appears to be the same technology, it may coordinate discussions between the Verification Organizations so that the verification is conducted by only one of them.
- (4) The Verification Organization shall notify all applicants (including applicants who were not selected for target technologies) of the results of selection of target technologies. In addition, the general outline of the results of the selection shall be disclosed by the Verification Organization and MOE.

#### 2. Considerations for Selection of Target Technologies

A Verification Organization shall comprehensively review after considering the indication below, while considering the opinions of the Technology Verification Committee and others. MOE may, based on discussions of Working Groups, as required, apply additional considerations for selection relating to environmental protection effectiveness or other factors for each technological field.

#### (1) Factors related to the Application

Does the technology described by the application fall under a target of technological field?

Is the application complete?

Is the technology at the commercially available?

Has no similar verification been conducted in the past for a similar technology, using public funds?

#### (2) Feasibility of Verification

Is verification feasible from the perspective of institutional arrangements for implementation, etc.?

Can an adequate Verification Testing Plan be prepared?

#### (3) Environmental Protection Effects, etc.

Can the principles and workings of the technology be scientifically explained?

Does not the technology raise any secondary environmental problems or concerns, etc.?

Can significant environmental protection effects be expected?

Is it an innovative technology?

#### Chapter 6: Preparation of Verification Testing Plans

- 1. A Verification Organization shall prepare a Verification Testing Plan in order to specify detailed testing criteria, etc., based on Verification Testing Guidelines, through discussion with Verification Applicants, and after consideration by the Technology Verification Committee, and submit the Verification Testing Plan to the MOE. It, where necessary, may express an opinion to the Verification Organization regarding the Verification Testing Plan.
- 2. A Verification Applicant shall submit to the Verification Organization a written statement indicating agreement with and acceptance of the contents of the Verification Testing Plan.
- 3. Regarding paragraph 1, for a given technology, a Verification Organization may, after discussion with MOE and admittance of a verification applicant, and as necessary, be permitted to adopt testing methods that differ from Verification Testing Guidelines, in cases where it is appropriate to modify part of the testing methods specified in Verification Testing Guidelines, where there is a concern that the environmental protection impact, etc., of the said technology may not be properly verified if done in accordance with Verification Testing Guidelines that apply to the said technology, such as in cases where secondary environmental impacts may arise that were not anticipated in the said Verification Testing Guidelines due to the characteristics of the said technology.

#### Chapter 7: Implementation of Verification Testing

- 1. A Verification Organization shall conduct verification testing of each target technology, based on Verification Testing Guidelines, and where necessary, on a Verification Testing Plan.
- 2. The Verification Organization may, where necessary, instruct an external organization to implement a portion of the verification testing, based on a subcontracting agreement, etc. When this is done, the Verification Organization shall provide instructions and supervisions to ensure that the said external organization conducts the verification testing in accordance with Verification Testing Guidelines and a Verification Testing Plan.

#### Chapter 8: Preparation of Report of Verification Test Results

1. After discussions of the Technology Verification Committee, the Verification Organization shall compile a Report of Verification Test Results, and obtain the approval of MOE for the said report. When preparing the Report of Verification Test Results, the report

shall be in accordance with the contents and document formats for a Report of Verification Test Results as prescribed in Verification Testing Guidelines.

- 2. The Verification Organization shall provide notice to Verification Applicants regarding Reports of Verification Test Results for which approval has been obtained. MOE, after approving the Report of Verification Test Results, shall without delay issue to the applicant a Logo and verification number thorough the Verification Organization as prescribed in chapter 11, section 1.
- 3. Regardless of the results of verification testing, all Reports of Verification Test Results shall be entered into a database and made public under the provisions of the following chapter.

#### Chapter 9: Preparation of Database

- 1. MOE shall organize information on environmental technologies for which verification has been completed, and on create, operate, and manage databases for information provision, with the aim of providing information to users by Internet.
- 2. MOE shall enter into databases any Verification Testing Guidelines, Verification Testing Plans and Reports of Verification Test Results for verifications record and provide information, including open invitations for applications for Verification Organizations and verification technologies, and information related to discussions by the Advisory Committee of the Pilot Program, etc.
- 3. MOE shall prepare English versions of Verification Testing Guidelines and Reports of Verification Test Results from the contents of the database, and make this information available outside of Japan.

#### Chapter 10: Use of Logo

#### 1. Objective

The logo indicated in Annex 2 is specified as the logo (hereinafter the "Logo") of the Environmental Technology Verification Pilot Program of MOE, with the objective of publicizing this Pilot Program to the general public.

#### 2. Scope and Restrictions of Use

- (1) The Logo may be used to introduce the Pilot Program to the general public through newspapers, magazines, academic papers, and Web sites, etc., and no special approval shall be required for this type of use.
- (2) For target technologies for which the Report of Verification Test Results has been approved by MOE, the Logo may be used for introduction and advertisement, etc., the said technologies (neither notifications nor approvals for usage of the Logo specifically needs to related organizations). However, when this is done, the Method of Display under paragraph 3 must be observed, and the said technology shall not be used in any way whatsoever implies the guarantee, certification, or approval of MOE and organizations related to the Pilot Program.
- (3) The Logo may be used to indicate the fact of being selected by an organization that has been selected by the Verification Organization (neither notifications nor approvals for usage of the Logo specifically needs to related organizations). However, after the end of a period for which the said organizations act as Verification Management Organization and Verification Organizations, no new uses in this manner shall be permitted.

(4) In principle, any uses of the Logo other than those stated in (1) to (3) above shall not be permitted. Any doubts that arise with regard to use shall be discussed with MOE.

#### 3. Method of Display

#### (1) General Points to be Observed

The Logo shall not be used in any way whatsoever that implies a guarantee, certification, or approval from MOE, a Verification Organization, or other organizations related to the Pilot Program, with regard to the business entity, product, technology, or service, etc., associated with the target technology that has been verified.

The Logo shall not be used as a part of the name of any product, service, or technology, etc.

Note: When a Verification Applicant uses the Logo to introduce or advertise the technology, the following points must also be observed.

The unique verification number that MOE has issued for the verified target technology shall be displayed adjacent to the Logo.

The Logo shall be located adjacent to the name, etc., of the verified target technology, so as to facilitate clear identification of the verified target technology. For products for which the verified target technology is only one model in a product series, that fact shall be indicated clearly. Moreover, where only one model of a product series has received verification, in principle, the Logo shall not be used for another product in the series, unless the technology and performance of that product are identical to that of the technology that was verified. Any doubts that arise with regard to whether or not the technologies or performance of products are identical shall be discussed with MOE.

If the Logo is used for introductions of the technology or other use, it shall not be used independently, and the following statement shall always be displayed adjacent to the Logo: "Information on the performance of this technology may be obtained from the Web site of the Environmental Technology Verification Pilot Program. The name and the Logo of the Environmental Technology Verification Pilot Program do not imply any guarantee, certification, or approval from MOE or related organizations with regard to the technology or its performance." The statement shall be displayed in a size large enough to be read without difficulty.

#### (2) Method of Display of Logo

The color scheme of the Logo shall be as indicated in an annex, and no other color schemes may be used.

The Logo shall be displayed in a way that makes it easily distinguishable as an independent mark.

The Logo shall not be cut, divided into parts, or modified in any way. However, the size of the Logo as a whole may be modified.

Where the Logo is used on an Internet website, a link shall be provided from the one to the website of the Environmental Technology Verification Pilot Program (http://www.env.go.jp/policy/etv/).

#### 4. Improvement Orders, etc.

MOE may issue an order, such as rectify or halt the use of the Logo, to a party that uses the Logo in a way that contravenes these Implementation Guidelines.

#### Chapter 11: Treatment of Intellectual Property

- 1. Verification Organization shall not use information relating to a Verification Applicant's environmental technologies that has been obtained through verification testing, for any purpose other than for verification testing. When providing confidential information associated with the said technology to a Verification Organization, a Verification Applicant may demand that the Verification Organization conclude a declaration of obligation of confidentiality in a format specified separately by the Verification Organization.
- 2. If rights (hereinafter "a patent, etc.") stipulated by paragraph 1, article 30, of the special measures law on Industrial Revitalization are newly acquired through the results of implementation of verification testing, MOE may not assume that patent, etc., from the Verification Organization. Regarding the handling of the said patent, etc., in case that the Verification Organization shall strive to use the said patent, etc., giving due consideration to its effective use, through discussions with MOE, as required.
- 3. Any copyrighted works that prepared in association by the implementation of this Pilot Project, such as Verification Testing Guidelines or a Report of Verification Test Results, shall be the copyright of MOE.

#### Chapter 12: Cost Allocation

Under this Verification Pilot Program, in principle, the Verification Applicant shall bear the costs required for delivery and installation of the target technology at the testing facility, operation of the target technology in cases where verification testing is conducted in-situ, and removal and return of the target technology after completion of testing; MOE shall bear the costs of measuring the environmental protection effects of the target technology, and any other costs. Details on this matter shall stipulate in Verification Testing Guidelines.

#### Chapter 13: Disclaimers

1. With the exception of intentional damage or gross negligence, no organizations associated with the Pilot Project, including MOE, Verification Organizations, or other, shall bear any responsibility whatsoever, in the event that any losses occur in connection with implementation of this Verification Pilot Program, such as breakdowns or damage to the

equipment of the Verification Applicant.

- 2. With the exception of intentional damage or gross negligence by a third party, the Verification Applicant shall bear responsibility in the event that any damages/injury occur to a third party, due to equipment defects, and no organizations associated with the Pilot Project, including MOE and Verification Organizations, shall bear any responsibility whatsoever.
- 3. In the event that any dispute arises between a Verification Applicant and a third party, in connection with public release of a Report of Verification Test Results, no organizations associated with the Pilot Project, including MOE, Verification Organizations, or other, shall bear any responsibility whatsoever.
- 4. In the event that any changes are made to specifications that affect the basic performance of a target technology, after the change, the data in a Report of Verification Test Results shall not be applicable to the said technology or use the Logo.
- 5. In the event that any problem is made to uses of the Logo, no organizations associated with the Pilot Project, including MOE, Verification Management Organizations or others shall bear any responsibility whatsoever.

## Chapter 14: Evaluation of Status and Results of Program Implementation, and Reflecting Findings in the Program in Subsequent-Years

- 1. In order to improve the methodologies and institutional arrangements of environmental technology verification, MOE shall conduct assessments through the Advisory Committee of the Pilot Program regarding the status of implementation and results of the Pilot Program, with the involvement of representatives of each participating party, and reflect the findings in the Program during subsequent fiscal years. In addition, in order to determine the results of verification during the pilot phase of the program, the Ministry shall regularly seek to determine the extent of market expansion due to verification and the effectiveness of the verification results, targeting corporations that have undergone verification of a technology.
- 2. Verification Organizations may implement changes to a portion of these Implementation Guidelines after obtaining the approval of MOE, in order to ensure flexibility of implementation during the Pilot Project.

# Section 2: Implementation by Fee Collection System

#### Chapter 1: Institutional Arrangements for Implementation of Pilot Program

#### 1. Ministry of the Environment

MOE shall be responsible for the selection of target technology categories for verification, selection of Verification Management Organizations, technical development of testing methodologies, and the release from the database of verification testing results and related information, and shall conduct the overall operation of the Pilot Program, as well as comprehensive discussions of verification methodologies and the establishment of institutional arrangements for verification.

#### 2. Advisory Committee of the Environmental Technology Verification Pilot Program

The Advisory Committee of the Environmental Technology Verification Pilot Program (hereinafter "Advisory Committee of the Pilot Program"), established on request of the Director of General Environmental Policy Bureau of the MOE shall discuss and provide advice based on expert opinion, regarding basic matters relating to implementation of the Pilot Program, including the tasks conducted by the said Ministry.

#### 3. Verification Management Organizations

The Verification Management Organization shall prepare Verification Testing Guidelines, and conduct the selection of Verification Organizations, as well as commission verification testing to Verification Organizations, and establish categories for fees associated with verification testing and collect them from Verification Applicants. Moreover, as required, the Verification Management Organization may conduct technical development of verification testing methodologies on behalf of MOE. Regarding Verification Management Organizations, it is desirable to establish one organization with the capacity to operate the entire Pilot Program, but as an interim measure, it is permitted to establish one organization for each technological field.

In addition, Verification Management Organizations shall be granted to combine the function as a Verification Organizations in appropriate cases, in view of the considerations presented in paragraph 2, chapter 5, section 2 of these Implementation Guidelines, referring to the selection of the said technology categories. However, to avoid excess of operation, in principle, the activities of Verification Organization are expected to be minimized. (the related provisions: paragraph 1, chapter 6)

Moreover, when MOE conducts advertising projects related to this project, the Verification Management Organizations may organize the matters relevant to this field.

#### 4. Working Groups

The working groups (hereinafter "Working Groups") established by the Verification Management Organization in each target technological field, shall discuss and provide advice based on expert opinion in each category, regarding matters handled by the said Verification Management Organization, including the preparation of Verification Testing Guidelines, and the selection of Verification Organizations. The Working Groups shall consist of persons who are knowledgeable on these matters (academic experts, representatives of technology users, etc.). In addition, Working Groups shall assist Advisory Committee of the Pilot Program, with their exclusive knowledge.

When appropriate, a number of target technology categories may be bundled into one Working Group. In addition, in order to develop more effective systems, the enlarged-Working Group (stakeholders' conference) shall be held when needed. As for selecting procedure and Working Groups, it is permitted to be undisclosed in terms of maintenance of trade secrecy.

#### 5. Verification Organizations

Verification Organizations shall establish the specific amounts of fees for verification procedures; issue open invitations for target verification technologies from corporations and other entities; examine technologies to be targeted for verification; prepare Verification Testing Plans; verify technologies (implement verification testing), and prepare Reports of Verification Test Results. Multiple Verification Organizations may be established in each technological field, to the extent permitted by budgets.

#### 6. Technology Verification Committee

A Technology Verification Committee, established by the Verification Organizations, shall discuss and provide advice based on expert opinion, regarding matters relating to implementation of tasks conducted by the Verification Organizations. The said Committee shall consist of persons who are knowledgeable on these matters (academic experts, representatives of technology users, etc.).

#### 7. Institute for development of the technology relevant to verification test

MOE or Verification Management Organizations may ask relevant organizations for technology development of a verification test when there is no relevant method of the verification test in a certain verification item.

The National Institute for Environmental Studies, where necessary, under commission from MOE or Verification Management Organization, shall conduct technology development of verification testing methodologies.

#### Chapter 2: Elimination of Target Technology Categories

MOE may temporarily, or on an ongoing basis, halt or eliminate a target of technological field, after obtaining advice from the Advisory Committee of the Pilot Program where necessary, in the event that a previously-selected target technological field has become inappropriate for practical reasons; for example, when verification has become inappropriate in view of the considerations presented in paragraph 1., section 2 of these Implementation Guidelines, or when it is thought that few responses are likely come from open invitations for target technologies. However, in cases where a target of technological field has been halted or eliminated, the notice of halt or elimination and its reasons shall be made public.

#### Chapter 3: Selection of Verification Management Organizations

#### 1. Procedures for the Selection of Verification Management Organizations

- (1) After receiving advice as required from the Advisory Committee of the Pilot Program, MOE shall invite legal entities (public corporations) or specified nonprofit organizations established under article 34 of Japan's Civil Code to apply to be Verification Management Organizations.
- (2) An organization desiring to become a Verification Management Organization shall submit to MOE an application form specified by the Ministry, together with the relevant

documentation relating to the verification management arrangements, etc., including any administrative functions that it may intend to commission externally. In addition, if the said organizations desire to combine the function as a Verification Organizations, in accordance with the provisions of Chapter 1, the required documentations specified in (2) of paragraph 1, Chapter 4, section 1 of these Implementation Guidelines shall be submitted to MOE. (Both applications for Verification Management Organizations and Verification Organizations must be submitted at the same time, however, the same one without overlapping documentation is allowed between both applications.)

- (3) On receipt of applications indicated under (2), MOE shall select Verification Management Organizations, after receiving advice, as required, from the Advisory Committee of the Pilot Program.
- (4) If the said organizations submit applications for Verification Organizations, MOE shall determine if the said organizations are appropriate for combining the function as a Verification Organizations or not, while referring to the reviews of each Working Group, after receiving advice, from the Advisory Committee of the Pilot Program, as required.
- (5) MOE shall enter into commissioning or contract agreements with Verification Management Organizations. Then Verification Management Organizations shall conduct management tasks related to verification in accordance with the provisions of chapters 5 and 6. In the case that the Verification Management Organizations also functioned as Verification Organizations, MOE shall separately contract or subcontract with the said organizations as Verification Organizations.
- (6) As a special measure during the Pilot Program phase (until fiscal 2007), MOE may forego invitations for Verification Management Organizations prescribed in (1) to (3), if practical reasons exist.

#### 2. Considerations for Selection of Verification Management Organizations

In selecting Verification Management Organizations, MOE shall select appropriate organizations to be Verification Management Organizations, after clarifying the requirements for Verification Management Organizations, and after conducting document reviews, and interviews where necessary, with consideration of the following points.

#### (1) Institutional Arrangements

- Does the applicant have adequate institutional capacity and personnel to fulfill the functions of a Verification Management Organization?
- Are specific task allocation and accountability arrangements clearly defined between organizations?
- Does the applicant have quality control systems in place that comply with JISQ9001: 2000 (ISO9001: 2000) "Quality Management Systems: Valid Requirements" standards?
- Does the applicant document the quality control systems that has established?
- Does the applicant conduct regular internal audits?
- Does the applicant maintain records relating to verification management tasks?

#### (2) Technical Capacity

• Does the applicant have personnel with an adequate track record in the organization's

technology categories?

 Does the applicant have adequate personnel with knowledge in the organization's technology categories?

#### (3) Assurance of Fairness

- Is there any concern that information and treatment will differ depending on the Verification Organization, in terms of procedures for selection Verification Organization, etc.?
- Is there any concern that the procedures for preservation of confidentiality of technical information, etc., obtained through verification management tasks will differ depending on the Verification Organization?

#### (4) Assurance of Impartiality

- Is there any concern about obstacles to impartial implementation of verification management affairs, caused by advice or other conduct favoring any particular Verification Organization, etc.?
- Is there any concern that special interests, such as with a particular Verification Organization, etc., will affect selection of Verification Organizations or procedures for commissioning of verification testing, etc.?
- Does the applicant implement proper handling, record-keeping and rectification measures, with regard to disputes or complaints, etc., from Verification Organizations and Verification Applicants?

#### (5) Fiscal Basis

- Does the applicant have an adequate fiscal basis and financial independence to fulfill the functions of a Verification Management Organization?
- Does the applicant conduct regular accounting audits?

#### Chapter 4: Establishment of Verification Testing Guidelines

1. A Verification Management Organization shall establish Verification Testing Guidelines for each target of technological field, with reference to the "Components of Verification Testing Guidelines" (Annex 1), based on consideration of the deliberations at the Working Groups, and as required, after discussions with MOE, and obtain the approval of the MOE. Verification Testing Guidelines shall be revised, as required, based on results of verification testing and on consideration of scientific and technological progress.

Documentation shall be attached to the Verification Testing Guidelines specifying the categories of fees that applicants must pay to Verification Management Organizations as prescribed under the cost allocation provisions of chapter 13, section 2. The establishment of the said categories shall be as detailed as possible, in order to allow Verification Organizations to establish the expected amounts of their own fees in accordance with the provisions of chapter 5, section 2.

2. Where no suitable methodologies exist for verification testing of a certain verification parameter, MOE or a Verification Management Organization may request the Institute for Development of the Technology relevant to Verification Tests to conduct technical development of verification testing methodologies. In such a case, the Verification

Management Organization shall prepare Verification Testing Guidelines based on the results of consideration by Institute for Development of the Technology relevant to Verification Tests.

#### Chapter 5: Selection of Verification Organizations

#### 1. Procedures for the Selection of Verification Organizations

- (1) After discussions in Working Groups, for each target of the technological field, a Verification Management Organization shall invite local governments or specified nonprofit organizations established under article 34 of Japan's Civil Code to apply to become Verification Organizations.
- (2) An organization desiring to become a Verification Organization shall submit to the Verification Management Organization an application form specified by the Verification Management Organization, together with the relevant documentation relating to the verification arrangements, etc., including any administrative functions that it may intend to commission externally.
- (3) On receipt of applications indicated under (2), the Verification Management Organization shall select Verification Organizations, while referring to the considerations stated in paragraph 2 and to the discussions of the Working Groups. The results of selection of Verification Organizations shall be reported to and require the approval of MOE.
- (4) MOE or a Verification Management Organization shall enter into commissioning or contract agreements with Verification Organizations selected in (3), and the Verification Organizations shall conduct verifications in accordance with the provisions of chapter 8, section 2. This agreement, in principle, is preferable to be concluded before commencing the procedure presented in chapter 6, "Examination of Target Technologies for Verification". However, as presented in paragraph 2, chapter 8, section 4, as the equivalent amount of fee contained in total amount is subject to change for the term of the project, the procedures and time period shall be given due consideration in order to ensure a flexible response to this agreement by each organization.

Note: In case the organization that has participated in this project as a Verification Organization by last FY wishes to continue being the Verification Organization of same target of technological field, instead of step (2) above, the organization shall be accepted to inform the Verification Management Organizations accordingly in writing during the application period presented in (1). The Verification Management Organizations, in case of being notified, can continue to choose the organization as the Verification Organization, to the extent permitted by budgets, without step (3) above.

#### 2. Considerations for Selection of Verification Organizations

In selecting Verification Organizations, the following points shall be considered, and document reviews and interviews shall be conducted, where necessary.

#### (1) Institutional Arrangements

- Does the applicant have adequate institutional capacity and personnel to fulfill the functions of a Verification Organization?
- Are specific task allocation and accountability arrangements clearly defined between

organizations?

- Does the applicant have quality control systems in place that comply with standards such as JISQ9001: 2000 (ISO9001:2000) "Quality Management Systems: Valid Requirements," and JISQ17025:2000 (ISO/IEC1705) "General Requirements for the Competence of Testing and Calibration Laboratories"?
- Does the applicant document the quality control systems that has established?
- Does the applicant conduct regular internal audits?
- Does the applicant maintain records relating to verification tasks?

#### (2) Technical Capacity

Does the applicant have an adequate track record in its technology categories?

Note: For a newly-established organization, does the applicant have personnel who possess an adequate track record in the organization's technology categories?

• Does the applicant possess personnel and testing facilities with adequate technical capacity to implement verification testing? (This does not preclude implementation by external organizations, based on subcontracts or contract agreements, etc., where necessary, for a portion of the verification testing.)

Note: Regarding an organization that does not possess its own testing and research organization, is it clear that the organization would be capable of fulfilling its role as a Verification Organization through association with an organization that does possess adequate institutional and technical capacity, in terms of the perspectives stated in (1) and (2) above.

#### (3) Assurance of Fairness

- Is there any concern that information and treatment will differ depending on the Verification Applicant, in terms of procedures for examination of verification target technologies and conduct of verification testing, etc.?
- Is there any concern that the procedures for preservation of confidentiality of technical information, etc., obtained through verification tasks will differ depending on the Verification Applicant?

#### (4) Assurance of Impartiality

- Is there any concern about obstacles to impartial implementation of verification testing, caused by advice or other conduct favoring any particular Verification Applicant?
- Is there any concern that special interests, such as with a particular Verification Applicant, will affect procedures for examination of verification target technology and conduct of verification testing, etc.?
- Does the applicant implement proper handling, record-keeping and rectification measures, with regard to disputes or complaints, etc., from Verification Applicants?

#### (5) Fiscal Basis

Does the applicant have an adequate fiscal basis and financial independence to fulfill

the functions of Verification Organization?

• Does the applicant conduct regular accounting audits?

#### Chapter 6: Examination of Target Technologies for Verification

#### 1. Procedures for the Examination of Target Technologies

- (1) Any organization that has been selected to be a Verification Organization shall, immediately after being selected, establish the expected amounts of fees relating to technology verification, with consideration of its own costs, etc., after discussions with a Verification Management Organization, and as required, with MOE, and based on the "fee categories" attached to Verification Testing Guidelines, and shall have the amounts with the Verification Management Organization. It is permissible to establish a range of expected fee amounts, by classifying them based on a number of conditions and factors to be considered, etc. However, these shall be as specific as possible, to enable applicants to estimate the amount of fees they will be required to pay.
- (2) The Verification Organization shall issue a separate open invitation for target technologies for each target of technological field with indicating expected fee amounts of itself. A party that wishes to receive technology verification (a developer, vendor, etc.; hereinafter "Verification Applicant") shall submit an application to a Verification Organization. Verification Organizations shall establish an application period that is as long as possible within a given fiscal year, within its own capacity to accept verification requests, but they may shorten the application period for practical reasons, such as if there are seasonal constraints on the implementation of verification.
- (3) The Verification Applicant shall complete the verification application, providing the required information, and submit the application along with the specified documents. The contents of the verification application shall be as stipulated in Verification Testing Guidelines.
- (4) For the technologies for which applications were received, a Verification Organization shall review the feasibility of verification of the said technologies, referring to the considerations in 2. and obtaining advice from the Technology Verification Committee as required, and obtain approval from a Verification Management Organization. In the interest of avoiding duplication in implementation of the budget, in cases where a Verification Management Organization finds that more than one application has been made to Verification Organizations for what appears to be the same technology, it may coordinate discussions between the Verification Organizations so that the verification is conducted by only one of them. Subsequently, a Verification Management Organization shall report the results of the approved review to MOE.
- (5) Verification Organizations shall notify applicants of the results of the reviews of technologies for which applications were received. When applicants for technologies that did not become targets for verification as a result of the reviews are being notified, the reasons for not being selected shall be explained. Verification Organizations, Verification Management Organizations and MOE shall disclose the individual results of the reviews of technologies in principle.

Note: The Verification Organizations combining the function as a Verification Management Organizations may issue open inventions for target verification technologies from corporations and other entities, according to Implementation Guidelines above, however, to avoid excessive concentration of operation, besides, not to prevent the project of other Verification Organizations, the said Verifications Organizations are preferable to refrain

from issuing open inventions, unless exceptional cases, there are no other inventions are issued by Verification Organizations. When the said Verification Organizations issue open inventions and review, "Verification Management Organizations" and "Technology Verification Committee" prescribed in the provisions of (1) to (5) shall be replaced with "MOE" and "Working Groups". In addition, the said organizations, where necessary, with mutual agreement with the participants, may entrust the other Verification Applicant for own open invitation to the technology categories for verification ("participants" refers to MOE, possible Verification Organization to be entrusted and applicants of the said technologies).

#### 2. Criteria for the Examination of Target Technologies

In selecting target verification technologies, the feasibility of technology verification for which applications were received shall be reviewed, while considering the following points. The Verification Management Organization may, based on discussions of Working Groups, as required, apply additional considerations for selection relating to environmental protection effectiveness or other factors for each of technological field.

#### (1) Factors related to the Application

Does the technology described by the application fall under a target of technological field?

Is the application complete?

Is the technology commercially available?

#### (2) Feasibility of Verification

Is verification feasible from the perspective of institutional arrangements for implementation, etc.?

Can an adequate Verification Testing Plan be prepared?

Is the Verification Applicant capable of covering fees associated with verification testing?

#### (3) Environmental Protection Effects, etc.

Can the principles and workings of the technology be explained?

Does the technology raise any secondary environmental problems or concerns, etc.?

Does significant environmental protection effects be expected?

#### Chapter 7: Preparation of Verification Testing Plans

- 1. A Verification Organization shall prepare a Verification Testing Plan in order to specify detailed testing criteria, etc., based on Verification Testing Guidelines, through discussion with Verification Applicants, and after consideration by the Technology Verification Committee, and submit the Verification Testing Plan to a Verification Management Organization. The Verification Management Organization, where necessary, may express an opinion to the Verification Organization regarding the Verification Testing Plan.
- 2. A Verification Applicant shall submit to the Verification Organization a written statement indicating acceptance of the contents of the Verification Testing Plan.

3. Regarding paragraph 1, for a given technology, a Verification Organization may, after discussion with a Verification Management Organization or applicants and admittance of a verification applicant, and as necessary, be permitted to adopt testing methods that differ from Verification Testing Guidelines, in cases where it is appropriate to modify part of the testing methods specified in Verification Testing Guidelines, where there is a concern that the environmental protection impact, etc., of the said technology may not be properly verified if done in accordance with Verification Testing Guidelines that apply to the said technology, such as in cases where secondary environmental impacts may arise that were not anticipated in the said Verification Testing Guidelines due to the characteristics of the said technology.

#### Chapter 8: Implementation of Verification Testing

- 1. A Verification Organization shall conduct verification testing of each target technology, based on Verification Testing Guidelines, on a Verification Testing Plan. Before implementation of the test, the Verification Organization, after coordinating with a Verification Management Organization, shall determine the amount and required payment date of fees for each technological categories, related to the said technology verification, and notify the applicant, and the upon receiving the said notice, applicant shall pay the fees to the Verification Management Organization by the required payment date. In principle, the fees must be paid before implementation of the test.
- 2. A Verification Organization may, where necessary, instruct an external organization to implement a portion of the verification testing, based on a subcontracting agreement, etc. When this is done, the Verification Organization shall provide instructions and supervision to ensure that the said external organization conducts the verification testing in accordance with Verification Testing Guidelines and a Verification Testing Plan.
- 3. In the event that for some reason the verification testing could not be completed or in case of any changes in Verification Testing Plans affects the amount of fees that have required, a Verification Organization shall explain the circumstances to MOE and the Verification Management Organization, and after obtaining their acknowledgement, negotiating with applicant, calculate the costs required to that point for testing, and determine the amount of fees that should be paid to the applicant.
- 4. Following 1 to 3 above, a Verification Management Organization shall pay the equivalent amount of fee collected from applicants, to a Verification Organization as a part of the costs for the project based on subcontracting or contacting agreement presented in paragraph 2., section 5., 1 (4).

#### Chapter 9: Preparation of Report of Verification Test results

- 1. After discussions of the Technology Verification Committee, a Verification Organization shall compile a Report of Verification Test Results, and submit it to a Verification Management Organization. The Verification Management Organization shall submit a report to MOE and obtain its approval of the report. On the approval of the report, as required, the Verification Management Organization or Moe may express an opinion, based on the considerations by Working Groups, to Verification Organization. When preparing the Report of Verification Test Results, the report shall be in accordance with the contents and document formats for a Report of Verification Test Results as prescribed in Verification Testing Guidelines.
- 2. The approved Report of Verification Test Results may be returned to Verification Organizations via Verification Management Organizations. A Verification Organization shall provide notice to Verification Applicants regarding Reports of Verification Test

Results for which approval has been obtained. It, after approving the Report of Verification Test Results, shall without delay issue to the applicant a Logo and verification number as prescribed in chapter 11.

3. Regardless of the results of verification testing, all Reports of Verification Test Results shall be entered into a database and made public under the provisions of the following chapter.

#### Chapter 10: Preparation of Database

- 1. MOE shall organize information on environmental technologies for which verification has been completed, and on create, operate, and manage databases for information provision, with the aim of providing information to users by Internet.
- 2. MOE shall enter into databases any Verification Testing Guidelines, Verification Testing Plans and Reports of Verification Test Results for verifications, record and provide information, including open invitations for applications for Verification Organizations and verification technologies, and information related to discussions by the Advisory Committee of the Pilot Program, etc.
- 3. MOE shall prepare English versions of Verification Testing Guidelines and Reports of Verification Test Results from the contents of the database, and make this information available outside of Japan.

#### Chapter 11: Use of Logo

#### 1. Objective

The logo indicated in an annex is specified as the logo (hereinafter the "Logo") of the Environmental Technology Verification Pilot Program of MOE, with the objective of publicizing this Pilot Program to the general public.

#### Scope and Restrictions of Use

- (1) The Logo may be used to introduce the Pilot Program to the general public through newspapers, magazines, academic papers, and Web sites, etc., and no special approval shall be required for this type of use.
- (2) For target technologies for which the Report of Verification Test Results has been approved by MOE and a Verification Management Organization, the Logo may be used for introduction and advertisement, etc., the said technologies (neither notifications nor approvals for usage of the Logo specifically needs to related organizations). However, when this is done, the Method of Display under paragraph 3 must be observed, and the said technology shall not be used in any way whatsoever implies the guarantee, certification, or approval of MOE and organizations related to the Pilot Program.
- (3) The Logo may be used to indicate the fact of being selected by an organization that has been selected by the Verification Management Organization or a Verification Organization (neither notifications nor approvals for usage of the Logo specifically needs to related organizations). However, after the end of a period for which the said organizations act as Verification Management Organization and Verification Organizations, no new uses in this manner shall be permitted.
- (4) In principle, any usage of the Logo other than those stated in (1) to (3) above shall not be permitted. Any doubts that arise with regard to use shall be discussed with MOE.

#### 3. Method of Display

#### (1) General Points to be Observed

The Logo shall not be used in any way whatsoever that implies a guarantee, certification, or approval from MOE, a Verification Management Organization, a Verification Organization, or other organizations related to the Pilot Program, with regard to the business entity, product, technology, or service, etc., associated with the target technology that has been verified.

The Logo shall not be used as a part of the name of any product, service, or technology, etc.

Note: When a Verification Applicant uses the Logo to introduce or advertise the technology, the following points must also be observed.

The unique verification number that MOE has issued for the verified target technology shall be displayed adjacent to the Logo.

The Logo shall be located adjacent to the name, etc., of the verified target technology, so as to facilitate clear identification of the verified target technology. For products for which the verified target technology is only one model in a product series, that fact shall be indicated clearly. Moreover, where only one model of a product series has received verification, in principle, the Logo shall not be used for another product in the series, unless the technology and performance of that product are identical to that of the technology that was verified. Any doubts that arise with regard to whether or not the technologies or performance of products are identical shall be discussed with MOE.

If the Logo is used for introductions of the technology or other uses, it shall not be used independently, and the following statement shall always be displayed adjacent to the Logo: "Information on the performance of this technology may be obtained from the Web site of the Environmental Technology Verification Pilot Program. Both the name and/or logo of the Environmental Technology Verification Pilot Program do not imply any guarantee, certification, or approval from MOE or related organizations with regard to the technology or its performance." The statement shall be displayed in a size large enough to be read without difficulty.

#### (2) Method of Display of Logo

The color scheme of the Logo shall be as indicated in an annex, and no other color schemes may be used.

The Logo shall be displayed in a way that makes it easily distinguishable as an independent mark.

The Logo shall not be cut, divided into parts, or modified in any way. However, the size of the Logo as a whole may be modified.

Where used on an Internet website, a link shall be provided from the Logo to the website of the Environmental Technology Verification Pilot Program (http://www.env.go.jp/policy/etv/).

#### 4. Improvement Orders, etc.

MOE may issue an order, such as rectify or halt the use of the Logo, to a party that uses the Logo in a way that contravenes these Implementation Guidelines.

#### Chapter 12: Treatment of Intellectual Property

- 1. No Verification Management Organization or Verification Organization shall use information relating to a Verification Applicant's environmental technologies that has been obtained through verification testing, for any purpose other than for verification testing. When providing confidential information associated with the said technology to a Verification Organization, a Verification Applicant may demand that the Verification Organization conclude a declaration of obligation of confidentiality in a format specified separately by the Verification Organization.
- 2. If rights (hereinafter "a patent, etc.") stipulated by paragraph 1, article 30, of the special measures law on Industrial Revitalization Law have been newly acquired through the results of implementation of verification testing, MOE may not assume that patent, etc., from the Verification Management Organization or the Verification Organization. Regarding the handling of the said patent, etc., in such a case the Verification Management Organization and the Verification Organization shall strive to use the said patent, etc., giving due consideration to its effective use, through discussions with MOE, as required.
- 3. Any copyright associated with works prepared in association with the implementation of this Pilot Project, such as Verification Testing Guidelines or a Report of Verification Test Results, shall be granted to MOE.

#### Chapter 13: Cost Allocation

1. Under this Pilot Program, in principle, the Verification Applicant shall themselves bear the costs required for delivery and installation of the target technology at the testing facility, operation of the target technology in cases where verification testing is conducted in-situ, and removal and return of the target technology after completion of testing; through the payment of fees, the Verification Applicant shall bear the costs associated with implementation of verification testing (costs arising at a Verification Organization, including costs of measurement and analysis, etc.; personnel costs; costs of supplies; and travel costs); MOE shall bear other costs (costs of the Advisory Committee of the Pilot Program, Working Groups, and Technology Verification Committee). A Verification Management Organization shall stipulate details on this matter in Verification Testing Guidelines.

2. "The costs associated with implementation of verification testing" above may, as required, include general administration costs.

#### Chapter 14: Disclaimers

- 1. With the exception of intentional damage or gross negligence, no organizations associated with the Pilot Project, including MOE, Verification Management Organizations, Verification Organizations, or other, shall bear any responsibility whatsoever, in the event that any losses occur in connection with implementation of this Verification Pilot Program, such as breakdowns or damage to the equipment of the Verification Applicant.
- 2. With the exception of intentional damage or gross negligence by a third party, the Verification Applicant shall bear responsibility in the event that any damages/injury occur to a third party, due to equipment defects, and no organizations associated with the Pilot Project, including MOE, Verification Management Organizations, Verification Organizations, or other, shall bear any responsibility whatsoever.
- 3. In the event that any dispute arises between a Verification Applicant and a third party, in connection with public release of a Report of Verification Test Results, no organizations associated with the Pilot Project, including MOE, Verification Management Organizations, Verification Organizations, or other, shall bear any responsibility whatsoever.
- 4. In the event that any changes are made to specifications that affect to the basic performance of a target technology, after the change, the data in a Report of Verification Test Results shall not be applicable to the said technology, and the Logo can not be used.
- 5. In the event that any problem, etc., arises for a user of the Logo in connection the use of the Logo, no organizations associated with the Pilot Project, including MOE, Verification Management Organizations, Verification Organizations or other, shall bear any responsibility whatsoever.

# Chapter 15. Evaluation of Status and Results of Program Implementation, and Reflecting Findings in the Program in Subsequent Years

- 1. In order to improve the methodologies and institutional arrangements of environmental technology verification, MOE shall conduct assessments through the Advisory Committee of the Pilot Program regarding the status of implementation and results of the Pilot Program, with the involvement of representatives of each participating party, and reflect the findings in the Program during subsequent fiscal years. In addition, in order to determine the results of verification, the Ministry shall regularly seek to determine the extent of market expansion due to verification and the effectiveness of the verification results, targeting corporations that have undergone verification of a technology.
- 2. Verification Management Organizations and Verification Organizations may implement changes to a portion of these Implementation Guidelines after obtaining the approval of MOE, in order to ensure flexibility of implementation during the Pilot Project.

Annex 1. Components of Verification Testing Guidelines

| Component  | Description in text                       |
|--|---|
| Terminology                                      | Description of technology, types of       |
|  | verification testing, and outline, of the |
|  | technology that is the subject of         |
|  | Verification Testing Guidelines           |
| Target technology                                | Description of technology that is the     |
|  | subject of Verification Testing           |
|  | Guidelines (applications, principles of   |
|  | operation, capacity, scale, etc.)         |
| Basic approach to verification testing           | Approaches regarding to all items that    |
|  | must be ascertained and considered,       |
|  | operation and loading of the              |
|  | equipment to be verified, etc.            |
| Definitions                                      | References to definitions of              |
|  | terminology under JIS, etc.               |
| Institutional arrangements for implementation of | Task allocation and scope of              |
| verification testing                             | responsibilities (including cost          |
|  | allocation) of major entities involved    |
|  | in verification testing                   |
| Ministry of the Environment                      | Tasks and responsibilities of the         |
|  | Ministry of the Environment               |
| Advisory Committee of the Environmental          | Tasks and responsibilities of the         |
| Technology Verification Pilot Program            | Advisory Committee of the                 |
|  | Environmental Technology                  |
|  | Verification Pilot Program                |
| Verification Organizations                       | Tasks and responsibilities of             |
|  | Verification Organizations                |
| Implementation organizations for verification    | Tasks and responsibilities of             |
| testing  | implementation organizations for          |
|  | verification testing                      |
| Technology Verification Committee                | Tasks and responsibilities of             |
|  | Technology Verification Committee         |
| Developers of environmental technologies         | Tasks and responsibilities of             |

|   | developers of environmental                          |
|---|--|
|   | technologies   |
| Owners of verification testing implementation         | Tasks and responsibilities of Owners                 |
| sites*  | of verification testing implementation               |
|   | sites  |
| Call for applications for technologies to be verified | All details required in the verification application |
| Preparations for verification testing*                | Tasks that must be conducted before                  |
|   | implementation of verification testing               |
| Selection of verification testing implementation      | Factors for site selection                           |
| sites*  | (consideration of environmental                      |
|   | impacts, turnaround time for testing,                |
|   | operational requirements for                         |
|   | equipment, etc.)                                     |
| Installation of equipment to undergo verification     | Instructions for installation of                     |
| testing*  | equipment, and all factors that must be              |
|   | considered for installation                          |
| Trial operation of equipment to undergo               | Instructions for trial operation, up to              |
| verification testing                                  | the actual verification testing                      |
| Preparations for verification testing*                | Instructions for installation of                     |
|   | temporary items needed for                           |
|   | verification testing                                 |
| Operation of equipment to undergo verification        | Instructions for operations and                      |
| testing*  | maintenance, etc., of equipment                      |
|   | during the period of verification                    |
|   | testing  |
| Operation*  | Instructions for operations and                      |
|   | recording of operating conditions                    |
| Maintenance*  | Instructions for maintenance                         |
|   | Recording of conditions, including                   |
|   | energy consumption, waste                            |
|   | generation, maintenance costs, etc.                  |
| Parameters of installation environment*               | Weather conditions for installation                  |
|   | site, including air temperature,                     |
|   | humidity, precipitation, etc.                        |

| Instructions for verification testing        | Parameters and methodologies for          |
|--|---|
|  | verification testing                      |
| Testing conditions                           | Environmental factors for equipment       |
|  | use during verification testing [e.g.,    |
|  | operating rate, specimens for testing     |
|  | (concentrations and amounts of            |
|  | environmental loading, etc.), air         |
|  | temperature], length of test period, etc. |
| Parameters for performance testing           | Measurement methodology, time             |
|  | period, frequency, and quality control,   |
|  | etc., for pollution concentrations and    |
|  | related parameters, etc.                  |
| Surrounding environmental impact parameters, | Measurement methodology, time             |
| etc.*  | period, frequency, and quality control,   |
|  | etc., for parameters necessary to         |
|  | determine impacts on surrounding          |
|  | environment                               |
| Verification Testing Plan                    | Parameters needed to establish            |
|  | Verification Testing Plan                 |
| Summary                                      |   |
| Verification testing results                 | Processing, calculations, and             |
|  | analytical methodologies, etc., for       |
|  | parameters of performance tests,          |
|  | impacts on surrounding environment,       |
|  | etc.                                      |
| Report preparation                           | Items to be covered in the report,        |
|  | methods of summarization                  |
| Appendices                                   | List of relevant JIS numbers, etc.        |
|  | Documentation to establish fee            |
|  | categories (only for categories covered   |
|  | under Section 2 of Pilot Program          |
|  | Implementation Guidelines)                |

<sup>\*</sup> Signifies components required for in-situ implementation of verification testing

Annex 2: Logo of Environmental Technology Verification Pilot Program



• Illustration of the Logo Use in a Product Advertisement

