Japan Environmental Technology Verification

ETV Ministry of the Environment

http://www.env.go.jp/policy/etv/

Projects Demonstrating the Current Situation of Environmental Technologies in Japan

Office of Environmental Research and Technology
Ministry of the Environment, Japan

OUTLINE

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Introduction (Summary of Program)

- In FY2003, the Ministry of the Environment (MOE) implemented the Pilot Project.
- The Pilot Project shifted into the Full-scale Project in FY2008.
- Performance of environmental technologies are verified by third parties.
- The Logo and Verification Number are issued to the verified technologies.

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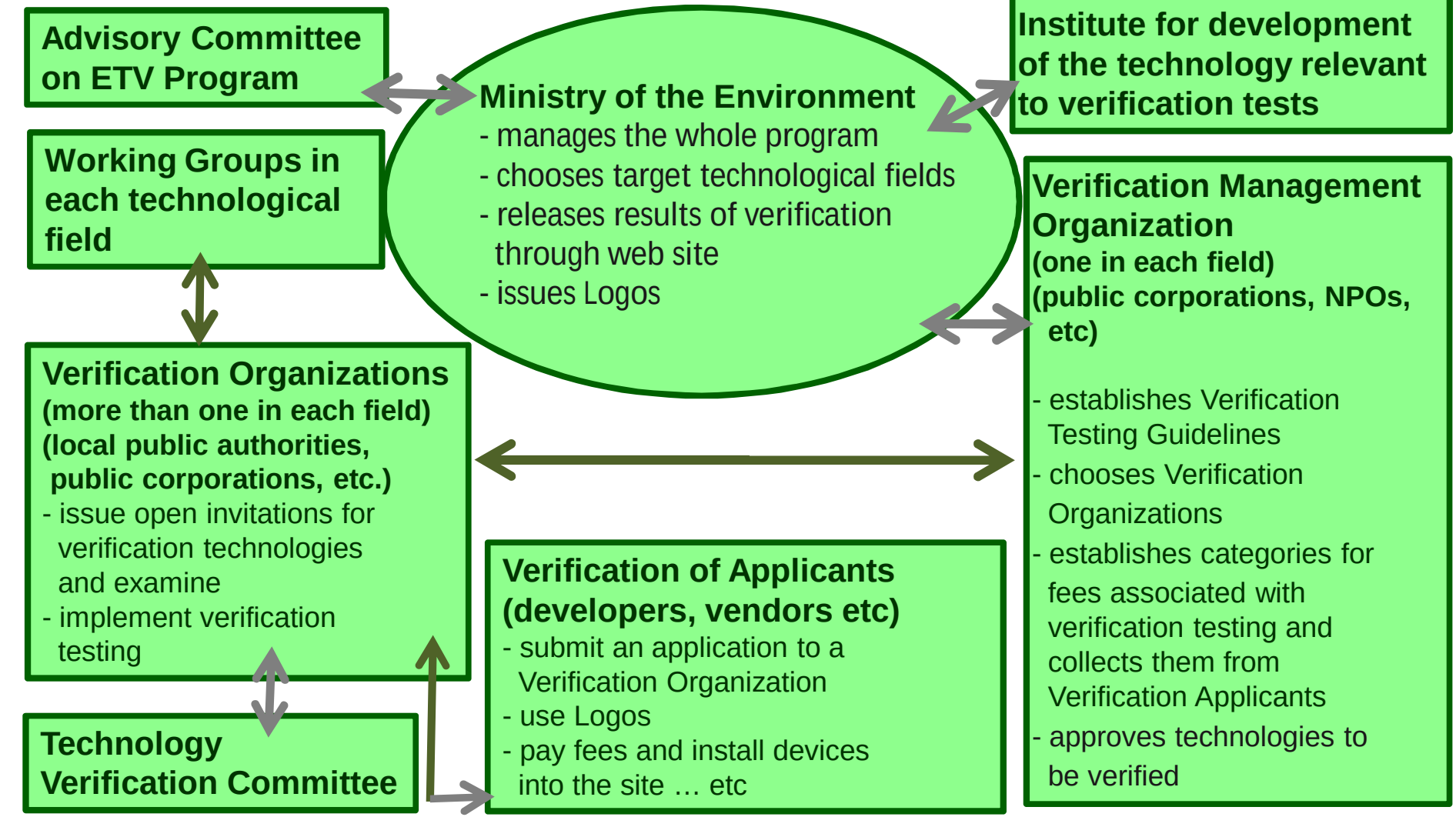
Structure of the Environmental Technology Verification Program



Report of Program in FY2010 and FY2011

- By FY2010, about 394 technologies had been verified.
- In FY2010, 72 technologies were verified at 7 verification testing organizations.
- The budget for FY2011 is 123 million yen.
- In FY2011, 8 technological fields are carried out as shown below:

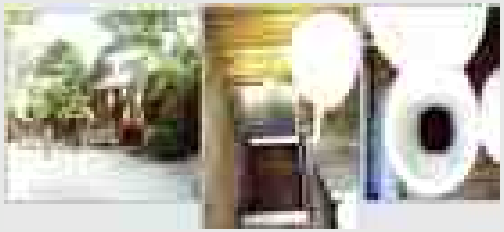
  “Government-sponsored system” - 1 field

  “Fee-based system” - 7 fields

Report of Program in FY2010 and FY2011

"Fee-based system" - 7 fields

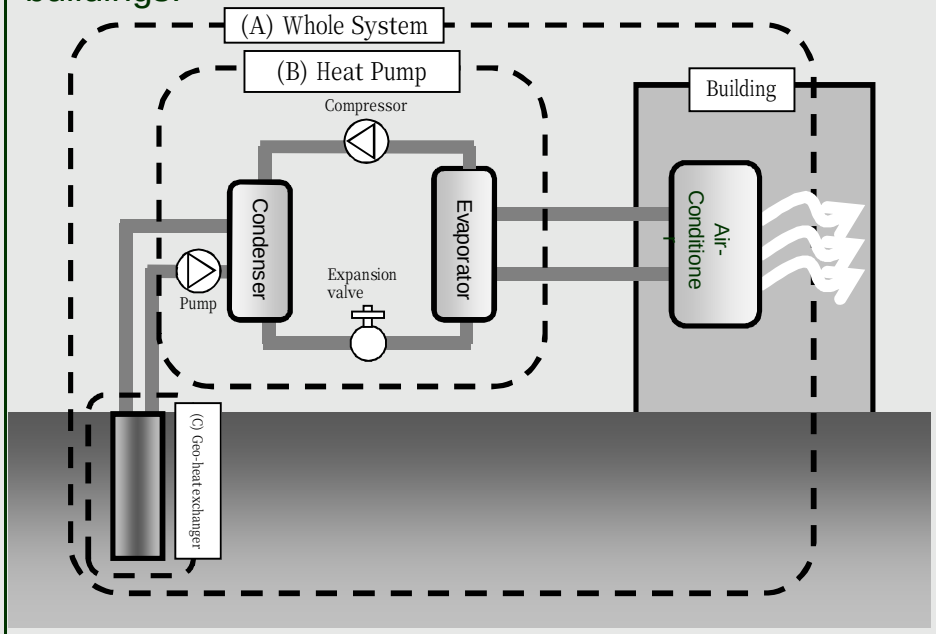
Technology Field	Contents	Verified in FY2010	Being verified in FY2011
Organic Wastewater Treatment Technologies for Small-Scale Establishments	Technologies for the treatment of organic wastewater. 	2	3

Technology Field	Contents	Verified in FY2010	Being verified in FY2011
Treatment Technologies for Human Waste in Nature Area	Technologies for the treatment of human waste in toilets in the areas that are not provided with sewage, drainage, or electricity. 	2	1
Technologies for Improving the Water Quality of Lakes and Reservoirs	Technologies for directly removing pollutants that have accumulated in water, benthic mud, etc., or for preventing internal production of pollutants within enclosed lakes and reservoirs. 	1	2

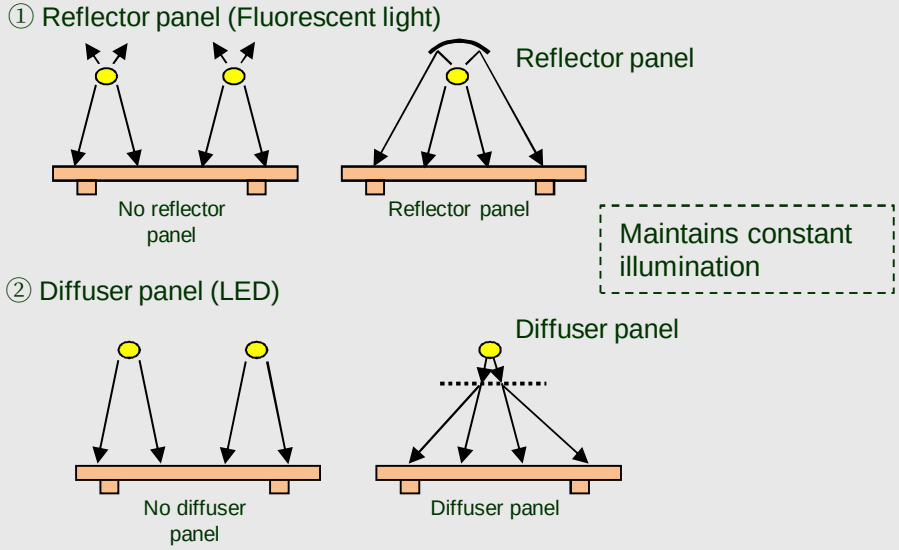
Technology Field	Contents	Verified in FY2010	Being verified in FY2011
Water Environment Improvement Technologies in Enclosed Coastal Seas	Technologies that contribute either directly to the improvement of water quality and benthic condition or to the improvement of the environmental conditions for marine life in enclosed coastal seas. 	1	1

Technology Field	Contents	Verified in FY2010	Being verified in FY2011
Heat-Island Mitigation Technologies to Reduce Air Conditioning and Other Loads by using Building Envelope Systems	Technologies of enveloping buildings with films, etc. after construction for the mitigation of the heat island effect by reducing indoor heating and cooling loads and thereby suppressing anthropogenic heat radiation.  Window Radiation Shield Film	58	37

Technology Field	Contents	Verified in FY2010	Being verified in FY2011
Simplified VOC Measurement Technology	Featured with simple operation & management and fast quantification, this technology is useful for voluntary VOC emission reduction in plants using VOCs such as process management or device management.	1	Still open for more verifications

Technology Field	Contents	Verified in FY2010	Being verified in FY2011
Heat-Island Mitigation Technologies - Air Conditioning Systems by Ground Source Heat Pumps Using Underground Heat or Wastewater	A heat-pump air-conditioning system using ground source, groundwater or sewage is intended to provide efficient heating and cooling performance compared with a system based on air heat. By making the most of the properties of groundwater, it can thereby contribute to reductions in artificial exhaust heat from buildings. 	7	3

“Government-sponsored system” - 1 field

Technology Field	Contents	Verified in FY2010	Being verified in FY2011
Global warming mitigation technologies （energy reduction for lighting（reflector panel, diffuser panel, etc.））	Usage of reflector and diffuser panels in lighting fixtures can reduce energy consumption and greenhouse gases 	-	preparing to accept applications

New Target Technologies for Later Years

- Planned new global warming mitigation technologies
  - "Natural lighting" technologies

    - Window fixtures and skylights allow sunlight to enter thus reducing energy consumption for lighting

  - Auto Dimming Technologies

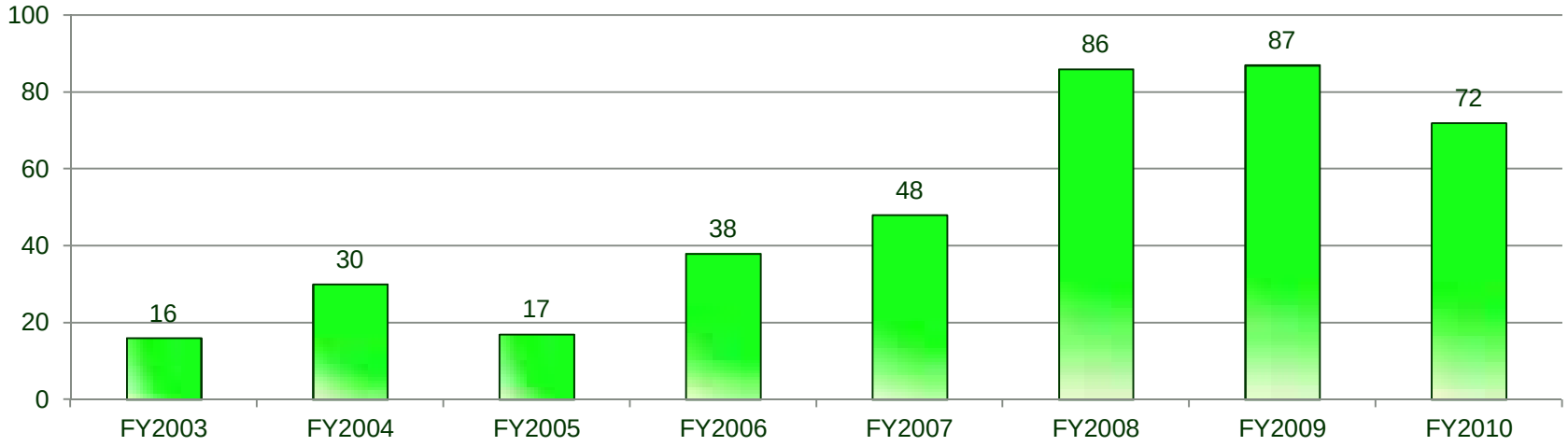
    - By automatically adjusting lighting levels to match daylight and human activities, energy consumption of lighting can be reduced

- Combining different key technologies for energy saving and/or low-carbon technologies
- Pollution control technologies and co-benefits technologies for overseas

Main Issues of Japanese ETV

Due to the current economic downturn, the Japanese ETV program faces the challenges below:

- **The number of verifications remains at the same level**
- **Difficulty to secure a budget**



- **Urgent tasks are to revitalize and to review the framework**
- **Based on the above mentioned points, consider collaborating with foreign countries (Joint and co-verification, etc.)**

Main Issues of Japanese ETV

- **Projects revitalizations**
  - **Upgrade verification advantages**

    Increase publicity（Using logo, etc.）
    Add more value to verifications results for applicants.

- **Review the framework**
  - **Consider simple and non-time consuming application processes and actively collaborate with the private-sector**
  - **Point at Issue**

    How to ensure the quality of verification testing procedures and results, or to manage projects continuity, etc.

For further information please visit:

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