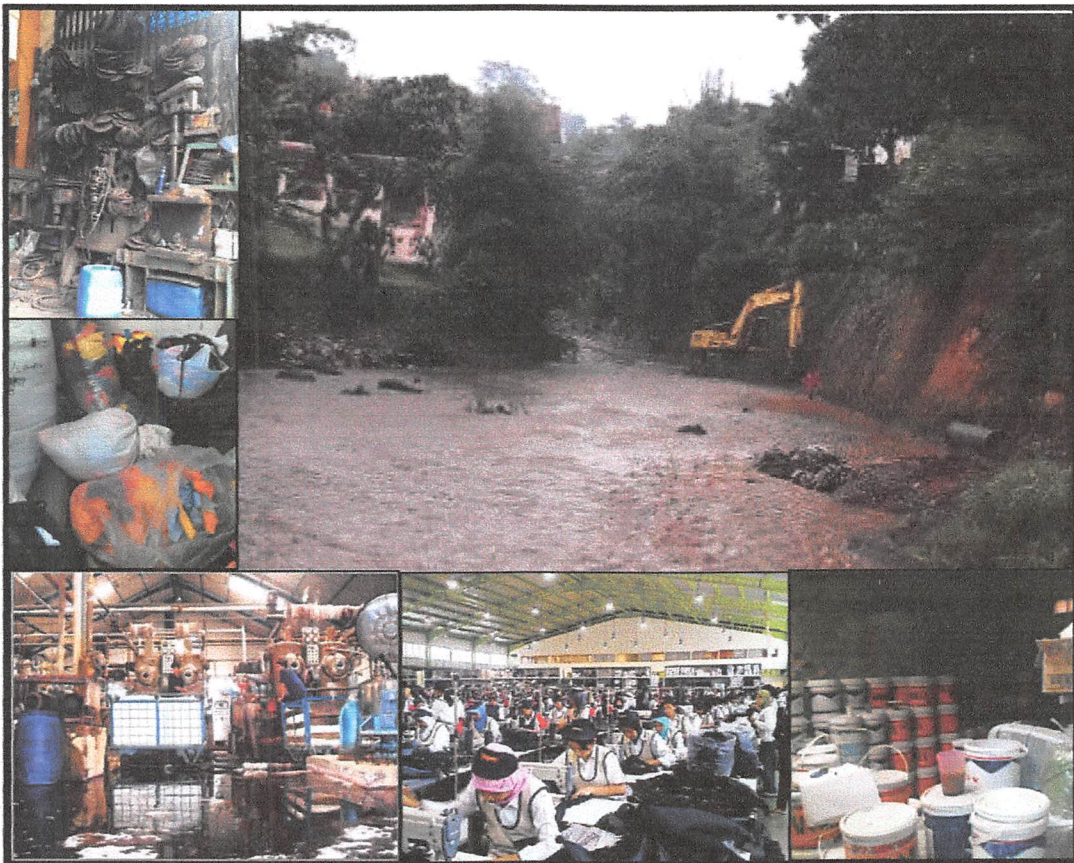


## Environmental issues and need assessment for eco-town development in Bandung City



Coordinator:  
Prof. Dr. Erri N. Megantara

Members:  
Parikesit, M.Sc., Ph.D  
Sunardi, M.Si., Ph.D  
Susanti Withaningsih, M.Si  
Dendi Muhammad, M.Si



The Institute of Ecology  
Research Institute  
**UNIVERSITAS PADJADJARAN**



Bandung Board of Planning  
and Regional Development

August, 2009





Bandung Board of Regional  
Development and Planning



Institute of Ecology  
Universitas Padjadjaran



## Report of Activity 3

### Report on

# Need Assessment of Training and Awareness Raising

#### Coordinator:

Prof. Dr. Erri N. Megantara

#### Members:

Parikesit, M.Sc., Ph.D

Sunardi, M.Si., Ph.D

Susanti Withaningsih, M.Si

Dendi Muhammad, M.Si



80GYE5.COM/PASOPAT





The Institute of Ecology,  
Universitas Padjadjaran

and



Bandung Board of Planning  
and Regional Development

## Report of the Stakeholder Dialogue



### Report on Activity 2: Stakeholder Dialogue

Coordinator:

Prof. Dr. Erri N. Megantara

Members:

Parikesit, M.Sc., Ph.D

Sunardi, M.Si., Ph.D

Susanti Withaningsih, M.Si

Dendi Muhammad, M.Si





Bandung Board of Regional  
Development and Planning



Institute of Ecology  
Universitas Padjadjaran

Report of Activity 3

## TRAINING ON CAPACITY BUILDING AND AWARENESS RAISING



A REPORT TO :



Bandung,  
October, 2009

Coordinator:  
Prof. Dr. Erri N. Megantara

Members:  
Parikesit, M.Sc., Ph.D  
Sunardi, M.Si., Ph.D  
Susanti Withaningsih, M.Si  
Dendi Muhammad, M.Si



BANDUNG BOARD OF REGIONAL DEVELOPMENT AND PLANNING

INSTITUTE OF ECOLOGY UNIVERSITAS PADJADJARAN



# Training of Education for Sustainable Development (ESD)

[Report on Activity 4]

A Report to UNEP

Coordinator:  
Prof. Dr. Erri N. Megantara

Members:  
Parikesit, M.Sc., Ph.D  
Sunardi, M.Si., Ph.D  
Susanti Withaningsih, M.Si  
Dendi Muhammad, M.Si



2009



UNEP

United Nations  
Environmental Programme

BANDUNG, WEST JAVA, INDONESIA



---

**Environmental issues and conceptual action plan for  
ecotown development in the City of Bandung,  
West Java, INDONESIA**

---

**POLICY PAPER**

**Coordinator:**

Prof. Dr. Erri N. Megantara

**Members:**

Parikesit, M.Sc., Ph.D

Sunardi, M.Si., Ph.D

Susanti Withaningsih, M.Si

Dendi Muhammad, M.Si

**(SSFA/ #9-29-11008)**

**Small-Scale Funding Agreement**

**THIS SMALL SCALE FUNDING AGREEMENT (SSFA) and its annexes (this "Agreement") is made on 16 June 2009.**

**BETWEEN:**

**United Nations Environment Programme (hereinafter referred to as "UNEP" having its office at United Nations Avenue, Gigiri, P.O. Box. 30552, 00100 Nairobi Kenya and represented by its Division of Technology, Industry and Economics (DTIE), International Environmental Technology Centre (IETC)), an international inter-governmental organisation established by the General Assembly of the United Nations.**

**AND:**

**Institute of Ecology, Universitas Padjadjaran (hereinafter referred to as "IOE"), a research institute represented by its Director and having its office at Jalan Sekeloa No. 1, Bandung, 40132, INDONESIA.**

**Based on this Agreement between UNEP and IOE, UNEP agrees to co-operate with IOE with respect to the project entitled "Development of Eco-towns In the Asia-Pacific Region" in Bandung, Indonesia. Annexes to this Agreement, including the attached Project Document/Implementation Plan (Annex-A) and Budget (Annex-B) are part of this agreement.**

**1. Project objectives to which the small-scale funding contributes:**

- To develop a comprehensive urban environmental policy framework within which the eco-town policy will be contextualized.
- To develop a shared vision on sustainable development of the private sector through stakeholder dialogues.
- To raise awareness of the private sector entities to incorporate environmental criteria in their activities.
- To raise awareness of civil society entities on the eco-town policy framework and the broader environmentally friendly lifestyles that are needed as a result.

2. Activities to be carried out with the support of the small-scale funding:

**Activity 1: Conceptualization of the Environment Policy Framework**

- Needs assessment of industries and businesses in Bandung
- Consultation with stakeholders
- Identification of environmental issues and priorities for Bandung

**Activity 2: Stakeholder Dialogue**

- Identification of key stakeholders and partners
- Organization of dialogue workshop (one event)
- Development of a shared vision of sustainable environment for Bandung
- Prioritization of actions to be undertaken

**Activity 3: Training and Awareness Raising**

- Needs assessment of training and capacity
- Development of training curriculum and materials
- Organization of training and capacity building sessions (two events, August and October – held back-to-back with Activity 4)
- Development of online web pages for dissemination on the internet

**Activity 4: Education for Sustainable Development (ESD)**

- Identification of issues and priorities for education
- Dialogue for partnership (two events, August and October – held back-to-back with Activity 3)
- Development of resource materials related to ESD
- Development of web pages on ESD

3. Expected outputs to be achieved:

**Activity 1:**

- Report of needs assessment of industry in Bandung
- Draft "Policy Paper on the Environment in Bandung"

**Activity 2:**

- Report of the Stakeholder Dialogue
- Vision Statement
- Eco-town policy framework and Prioritized Action Plan (for 2010-2011)

**Activity 3:**

- Needs assessment report
- Training Report
- Website with online training/learning resources

**Activity 4:**

- Inventory of resource materials on ESD for Eco-towns
- Web pages on ESD for Eco-towns



4. Starting and ending dates for implementation of the activities:  
All the activities under this SSFA will be completed in six (6) months. The starting date for the implementation of the activities under this SSFA is the date of the countersignature and SSFA will expire on 31 December 2009.

5. UNEP shall provide IOE with funds up to a maximum amount of **US\$ 30,000**. The resources provided by UNEP will only be used by IOE in pursuit of the project objectives and for the activities to achieve the results as agreed to in 1 – 3 above. Funds will be made available in two instalments as indicated below and upon receipt of a payment request in USD, as follows:

<u>Schedule of payments</u>	<u>Date</u>
USD 14,000	Upon signature of agreement
USD 16,000	Upon submission of final report and final financial statement

The funds shall be deposited in:

**Bank Name**  BANK BNI Cabang  
Perintis Kemerdekaan  
**Address**  Jl. Perintis Kemerdekaan No.  
3 Bandung 40117, West Java  
INDONESIA

**Wire Instructions**  
**SWIFT address:** BNINID JAXXX

**Account Title**  Herry Y. Hadikusumah  
(Saving account)  
**Bank Account Number**  0022688105

6. Within 1 month upon expiry of this Agreement, IOE shall refund to UNEP any unspent balance of the above funds.

7. UNEP and IOE will cooperate to monitor the progress of this project. IOE shall submit to UNEP, substantive progress reports; financial reports and a final report on or before the given dates below:

<u>Reports</u>	<u>Date</u>
Report and outputs of Activity 1	31 July 2009
Report and outputs of Activity 2	31 August 2009
Report and outputs of Activity 3	31 October 2009
Report and outputs of Activity 4	15 November 2009
Final Financial Report	30 November 2009
Final Report	30 November 2009

8.a. IOE shall submit financial statements on the use of funds provided, as per UNEP's required format and within the agreed timeframe.

8.b. IOE shall keep accurate and up-to-date records and documents in respect of all expenditures incurred with the funds made available by UNEP under this Agreement,



to ensure that all expenditures are in conformity with the provisions of this Agreements and its annexes thereto.

8.c. Upon completion of the Project/or Termination of this Agreement, IOE shall maintain the records for a period of at least 3 years unless otherwise agreed upon between the Parties.

8.d. UNEP has the right, at its own expense, to have the records of IOE related to this cooperation reviewed and audited.

9.a. IOE shall consult with UNEP regarding the Intellectual Property Rights as appropriate.

9.b. IOE shall only use the UNEP name, logo and emblem in connection with the Project with the prior written consent of UNEP.

9.c. In no event will authorization of the UNEP name or emblem, or any abbreviation thereof, be granted for commercial purposes.

10. This agreement can only be changed through an agreed modification in writing.

11. Either party may terminate this Agreement upon serving a written notice to the other party at least 2 months prior to such termination.

12. IOE shall comply with all the above mentioned provisions and agrees that UNEP reserves the right to withhold any payment due to IOE's non-compliance with any of the provisions mentioned hereinabove.

13. Any dispute arising out of or in connection with this Agreement shall be settled amicably between UNEP and IOE. Should attempts at amicable negotiation fail, any such dispute shall, upon request by either party, be referred to arbitration in accordance with the UNCITRAL arbitration rules. The parties shall be bound by any arbitration award rendered as a result of such arbitration as the final adjudication of any such controversy, claim or dispute.

14. This Agreement shall enter into force upon signature by the Parties being effective from the date of the latest signature, and shall remain valid until 31 December 2009 unless terminated earlier pursuant to clause 11 above.

15. The Parties shall carry out their respective responsibilities in accordance with the provisions of the Agreement. The Parties shall determine and communicate to each other their respective focal points, having the responsibility for the Project implementation on its behalf.

16.a IOE shall be solely and completely responsible and accountable for all services performed by its personnel, agents, employees, or contractors (hereinafter referred to as "Personnel").

16.b. IOE shall be considered as having the legal status of an independent contractor. Personnel of IOE its contractors or anyone else working for IOE in the



execution of the Project or otherwise, are not employees of UNEP and are not covered by the privileges and immunities applying to UNEP and its staff pursuant to the Convention on the Privileges and Immunities of the United Nations. UNEP shall not accept any liability for claims arising out of the activities performed under the Agreement, or any claims for death, bodily injury, disability, damage to property or other hazards that may be suffered by IOE's Personnel as a result of their work pertaining to the activities under this Agreement.

16.c. IOE shall ensure that its personnel meet the highest standards of qualification and technical and professional competence necessary for the achievement of the objectives and results of the Project, and that decisions on employment related to the Project shall be free of discrimination of any nature. IOE shall ensure that all personnel are free from any conflicts of interest relating to the Project activities.

17.a. IOE shall not seek nor accept instructions regarding the activities under the present Agreement from any Government or other authority external to UNEP.

17.b. IOE shall refrain from any conduct that would adversely reflect on the United Nations and shall not engage in any activity which is incompatible with the aims and objectives of the United Nations or the mandate of UNEP.

18. Nothing in or relating to this Agreement shall be deemed a waiver, express or implied, of any of the privileges and immunities of the United Nations and UNEP.

19. This Agreement or its Annexes may be modified or amended only by written agreement between the Parties.

For UNEP

By: 

Name : Ms. Sylvie Lemmet

Title: Director, UNEP-DTIE

Date: 1 July 2009

For IOE

By: 

Name : Prof. Erri N. Megantara

Title: Director, IOE

Date:



## Project Document/Implementation Plan

### 1. Introduction: Eco-towns

Eco-towns are urban planning and environmental management efforts where industries located in the designated 'eco-town' area pursue synergies in resource utilisation, waste management, environmental preservation, and promotion of industrial & economic development. They practice resource recycling within their manufacturing process and in between the industries.

Eco-towns in Japan were developed in the last ten years by utilizing regional technology and industry in Japan. Local governments and enterprises have worked in partnership to build such complexes. As a result of this, and the sustained financial support from national ministries, eco-towns have been developed in more than 22 cities around Japan.

One of the basic concepts of eco-towns in Japan is "Zero-Emissions" where industries and factories keep the amount of wastes generated by their activities to a minimum, and properly recycle such waste as they inevitably produce, in collaboration with other industries, thereby establishing an appropriate recycling or exchange system.

IETC's eco-town initiative has focused on understanding the dynamics of eco-towns in Japan, and the potential they present to cities in other countries. This initiative<sup>1</sup> arises to develop working strategies and guidelines for the development of eco-towns in selected cities of the Asia Pacific region. A key element of this initiative has been the close collaboration that IETC has developed with Kawasaki and other cities and their eco-towns. One of the key issues covered in these studies has been that of exchange of waste resources between industries as a means of reuse and recycle, but also of cost savings and pollution reduction/cleaner production. IETC has also worked closely with the city of Kawasaki, Japan and its eco-town to disseminate lessons learnt to a wider international audience.

The eco-town concept takes into consideration the nature of the existing industries in an industrial area as well as nearby commercial and residential areas. The main objective is to reduce the environmental impacts of human and industrial activities so that the ecological sustainability of the area within the eco-town is increased.

The eco-town concept adopts an ecological focus to industrial production. This is also known as industrial ecology – an example of this is the use of by-products exchange between factories. The wastes or by-products of one industry can be used as the raw materials of another.

The eco-town approach enhances productivity and simultaneously reduces the negative impacts on the environment through tools, techniques and technologies

<sup>1</sup> This initiative, being carried out with support from the Global Environment Centre (GEC), focuses on extracting lessons from eco-towns in Japan in order to highlight their relative advantages and build capacities for their development and implementation.