



Distr. GENERAL

FCCC/SBSTA/1997/INF.3 13 October 1997

**ENGLISH ONLY** 

SUBSIDIARY BODY FOR SCIENTIFIC AND TECHNOLOGICAL ADVICE Seventh session Bonn, 20 - 29 October 1997 Item 8 of the provisional agenda

#### ACTIVITIES IMPLEMENTED JOINTLY UNDER THE PILOT PHASE

#### **Contact and Activity Information**

- 1. The secretariat updates information on activities implemented jointly (AIJ) on the United Nations Framework Convention on Climate Change (UNFCCC) website under CC:INFO products. The continuously updated section "CC:INFO/AIJ" contains a short updated history of the negotiations, a list of relevant documents (hotlinked if available), an update on findings in methodological work and all the information elements reproduced in this document.
- 2. The direct address is http://www.unfccc.de/fccc/ccinfo/defaij.htm.

#### I. WORK ON METHODOLOGICAL ISSUES

3. At its fifth session, the Subsidiary Body for Scientific and Technological Advice (SBSTA) requested the secretariat to develop practical options with regard to an indicative list of methodological issues related to activities implemented jointly under the pilot phase. The secretariat has undertaken work for that purpose with the support of Parties and in collaboration with a number of partners. Preliminary findings, obtained by consulting with experts, on the issue of the determination of environmental benefits, may be found below. Such initial findings will be utilized in developing practical options.

# A. The Reference Case / Baseline Scenario

- 4. Activities implemented jointly (AIJ) must fulfil the criteria of decision 5/CP1, to "bring about real, measurable and long-term environmental benefits related to the mitigation of climate change that would not have occurred in the absence of such activities" (paragraph 1(d)).
- 5. The baseline for an AIJ project is a counterfactual construct, a scenario that may never actually unfold. The baseline for an AIJ project defines the scenario that would have occurred in the host country in the absence of the activity implemented jointly. The baseline scenario is the necessary foundation for calculating, by comparison, the global environmental benefits that would accrue if the AIJ project were successfully completed.
- 6. Credible baselines are critical to determining the environmental benefits of activities implemented jointly.
- 7. Guidelines for the determination of AIJ baselines would be useful in promoting transparency and comparability in activities implemented jointly.

## 1. Characterizing the Baselines

- 8. The calculations underlying the baseline for each AIJ project need to be sufficiently transparent in order to allow Parties to the UNFCCC to verify the estimates or reproduce the calculations, should they choose to do so.
- 9. All activities implemented jointly require project-specific baselines. The methodologies used in calculating the baseline scenario may be sector-specific, technology-specific or country-specific.
- 10. The baseline scenario for an AIJ project should be constructed *ex ante* and should include an indication of greenhouse gas emissions expected to occur in the absence of the AIJ project.
- 11. A variety of technologies could be envisaged as central to the construction of the baseline scenario. For purposes of constructing the baseline and estimating the incremental environmental benefits of an activity implemented jointly, preferential consideration should be given to using the technology which would have been the most likely <u>marginal</u> addition to the host country economy. By contrast, using the <u>average</u> technology available in the host country as the foundation for the baseline may lead to an exaggerated and inaccurate estimate of the expected environmental benefits from the AIJ project.

# (a) System Boundaries

- 12. System boundaries for AIJ projects should be appropriate to the scale and complexity of the activity, so as to incorporate consideration of possible leakage.
- 13. For the purposes of constructing the baseline for an AIJ project, the relevant system boundary and timeframe should be determined by the project participants and approved by the

governments of the investing and host countries. This agreement should be accessible to the Parties to the UNFCCC in order to verify the assumptions, should they choose to do so.

- 14. In many cases, the relevant system boundary for the baseline of an AIJ project is the border of the site of the proposed activity. In other cases, the systemic effects of the AIJ project may be captured more completely if the boundary is defined by a network of inter-connected facilities, for example an electric utility grid, or by an economic sector like transportation or forest products.
- (b) <u>Time Frames For Activities Implemented Jointly</u>
- 15. The project participants, acting in accordance with accepted guidelines, will establish the time frame or duration of an activity implemented jointly. The selection of a relevant time frame may be guided by consideration of the technical or financial characteristics of the activity or by policy factors.
- 16. For example, in projects with equity financing, a relevant time frame for the determination of environmental benefits could be the engineering or operating lifetime of the project. In projects with debt financing, a relevant time frame may be the amortization or depreciation lifetime of the project.
- 17. Future attention should be given to those cases in which the annual net environmental benefits of an AIJ project become negative during the life of the project.
- (c) Enduring or Dynamic Baselines
- 18. The calculated baseline for each AIJ project should remain fixed, so as to ensure predictability for investors.
- 19. However, for projects with long lifetimes, the participants may propose revisions to the project baseline at appropriate intervals. Any such changes should be approved by both host and investing countries. They must be reported to the secretariat of the UNFCCC. Such changes could be subject to challenge by other Parties to the Convention.
- 20. For a given class of projects, the appropriate methodology of constructing baseline scenarios may change over time.
- 21. Technological change or change in the policy context of the host country, for example, may lead to changes in the method for calculating baseline scenarios.
- (d) Precision in the Determination of Environmental Benefits
- 22. The precision required in determining environmental benefits from activities implemented jointly should be commensurate with the scale and complexity of the activity. The degree of precision in the baseline need not exceed that which is needed for the measurement of the performance of the project.

- 23. An issue that will require further work is how to prevent systematic errors in the calculation of AIJ baselines.
- (e) <u>Verification of Environmental Benefits by Independent Third Parties</u>
- 24. Carbon emissions offsets have never been traded internationally before. Technical limits in estimating the environmental benefits and economic value of these emissions offsets reliably may add uncertainties to the evaluation of AIJ projects, compared to the normal array of risks associated with more traditional investments. These uncertainties suggest the need to establish a process for verification of the environmental benefits of AIJ projects.
- 25. One option for the verification of AIJ baselines involves the use of independent, third-party auditors. Third-party verification can be used to assess the credibility of AIJ baselines and of the related calculation of environmental benefits. Such verification procedures should confirm that the guidelines of the Conference of the Parties (COP) have been applied in a reasonable manner and that the data supplied by the project participants is credible.
- 26. Third party verification may not be necessary for all AIJ. Random audits of AIJ baselines may be sufficient to establish the credibility of the process. Alternatively, the verification process could be initiated on a specific project following a request from either a project participant or another Party to the UNFCCC.

# **B.** Environmental Benefits

- 27. Decision 5/CP.1 provides "that activities implemented jointly should bring about real, measurable and long-term environmental benefits related to the mitigation of climate change that would not have occurred in the absence of such activities" (paragraph 1(d)).
- 28. The estimated environmental benefits related to the mitigation of climate change of an activity implemented jointly (AIJ) are equivalent to the difference between the quantity of greenhouse gas (GHG) emissions released or sequestered as a result of the activity and the amount of GHG emissions that would have been released or sequestered in the baseline or reference scenario. If defined in this way, the estimated environmental benefits should take into consideration any possible leakage.
- 29. In assessing the environmental benefits of an activity implemented jointly, it is important to ensure that the claimed benefits fulfil the criteria of decision 5/CP.1. That is to say that the claimed benefits are real, measurable, long-term and additional.
- 30. The environmental benefits related to the mitigation of climate change of an AIJ would be recognized as <u>real</u> if the actual GHG emissions or sequestration can be shown to differ from a credible and probable baseline scenario, taking leakage into account. In the case of an GHG emission project, the actual GHG emissions in the project case must be lower than the projected GHG emissions in the baseline scenario. In the case of an GHG sequestration project, the actual rate of sequestration in the project case must be higher than the projected GHG emissions in the baseline scenario.

- 31. The environmental benefits of an AIJ related to the mitigation of climate change are considered to be <u>measurable</u> if the actual level of GHG emissions of the project case and the level of GHG emission in the baseline scenario can be established with a reasonable degree of certainty. The degree of certainty in each case will need to be determined. Direct measurement is the preferred method for observing emissions in the project case. This may not be possible in the baseline scenario, which is often a counterfactual case.
- 32. The environmental benefits of an AIJ related to the mitigation of climate change can be recognized as <u>long-term</u> if the emissions avoidance or sequestration are sustainable, i.e. they persist over an appropriate period of time which may extend beyond the life of the project.
- 33. The environmental benefits of an AIJ related to the mitigation of climate change can be recognized as <u>additional</u> if it can be demonstrated that the resulting environmental benefits related to GHG would not have otherwise occurred. Several methods are currently being used or developed to demonstrate this additionality. Possible methods include:
  - (a) Measuring additionality for an AIJ against a credible, quantitative baseline;
- (b) Defining narrow categories of activity types whose emission benefits will *a priori* be considered additional; or
- (c) Assessing additionality by evaluating whether an AIJ overcame financial (not to be confused with the aspects dealt with in the next section), institutional, technological, or other barriers to project development.
- 34. Guidelines should be developed to facilitate the determination of environmental benefits related to the mitigation of climate change. Such guidelines should provide a set of internationally accepted methods of executing the necessary calculations and evaluations of environmental benefits generated by an AIJ. In some cases, those guidelines could allow for a choice between such recommended methods or a combination of them.

# C. Financial Additionality

- 35. Decision 5/C.P.1 provides "that the financing of activities implemented jointly shall be additional to the financial obligations of Parties included in Annex II to the Convention within the framework of the financial mechanism as well as to current official development assistance (ODA) flows" (paragraph 1(e)).
- 36. This financial additionality should not be confused with the assessment of the financial feasibility of potential AIJ/Joint Implementation (JI) projects as an indicator of the environmental additionality of a project, if this indicator is to be used for such purposes.
- 37. The issue of financial additionality may become less significant after the pilot phase when emissions reductions are credited, assuming that considerably more private funding of JI will then take place. By definition, private funding is not ODA. Besides, it is unlikely that the private sector will contribute directly to the financial mechanism of the Convention.

Page 6

38. Among ways to operationalize financial additionality conceivable options include establishing a link between the recognition (or the crediting when established) of an AIJ with the level of ODA and contributions to the financial mechanism of the Convention, as well as excluding strictly from AIJ funding any ODA or GEF funding.

# D. Compatibility and Supportiveness of National Priorities

39. Activities implemented jointly should be compatible with and supportive of national environment and development priorities, especially in host countries. In this regard, it is important that designated national authorities of host Parties who are charged with the responsibility of approving AIJ have the capacity to ascertain whether the proposed activities are compatible with and supportive of national environment and development priorities and strategies. Individual Parties may establish their own criteria for acceptance of AIJ-projects, such as capacity building and transfer of appropriate technology.

# E. Possible Approaches and Need for Additional Work

- 40. To strengthen the credibility of the AIJ regime, guidelines and methodologies for establishing AIJ baselines should be developed. The degree of detail necessary in these guidelines and methodologies remains to be determined.
- 41. Methodologies for the determination of environmental benefits should meet the following criteria of credibility, transparency, operational simplicity and predictability. The Parties to the UNFCCC require that these methodologies be both credible and transparent. Project participants need methods that are simple to apply, user-friendly, and involve low transaction costs. Private investors require a measure of predictability in the application of the guidelines so that they may gauge the value of AIJ projects.
- 42. The guidelines for preparing AIJ baselines should provide project participants with several options. One option might include the use of tools such as simplified methodologies, matrices and analytic typologies. A second approach might include the use of some simple paradigmatic illustrations that could be followed by project participants in the construction of typical baselines. Yet another option could allow the project participants to construct more elaborate baseline scenarios based on sufficient country-specific and site-specific data.
- 43. Additional work may be needed in the following areas (not in an order of importance):
  - (a) Development of guidelines:
    - (i) at a level of specificity which needs to be determined;
    - (ii) with respect to system boundaries and consideration of leakage;
    - (iii) for the preparation of sector-specific and technology-specific baselines; and
    - (iv) to prevent systematic errors in the determination of AIJ baselines;

- (b) Identification of sectors and technologies which are to be given priority in this process of methodological work and identification of indicative criteria for these sectors and technologies;
- (c) Definition of narrow categories of projects that could be assumed on an *a priori* basis to provide additional environmental benefits;
- (d) Consideration of activities in which estimated emissions in the project case reach or exceed the level of estimated emissions in the baseline;
- (e) Institutional issues that would need to be addressed in a post-pilot phase with regard to crediting, if such crediting were agreed to by the Parties;
- (f) Establishment of appropriate procedures and mechanisms for third-party verification (Such work might be enriched by drawing upon lessons learned from the Helsinki Process on Tied Aid.);
- (g) Clarification of the operational definition of financial additionality with regard to ODA;
  - (h) Further exploration of the issue of "perverse incentives" and their implications;
- (i) The operational determination that environmental benefits are real and are long-term;
- (j) The possibility of earning credits in the future for focussed capacity-building activities; and
- (k) The problem of how to value benefits other than GHG emissions reductions or sequestration.

#### II. LIST OF ACTIVITIES IMPLEMENTED JOINTLY

44. The table below contains AIJ which have been reported in addition to the 62 AIJ listed in document FCCC/SBSTA/1997/12/Add.1. These activities have been accepted, approved or endorsed by the designated national authorities for AIJ. A consolidated, updated table is available on the UNFCCC website, providing links to reports on AIJ available in electronic format.

Activity Type	Activity Title	Parties
Forest preservation	Commercial Reforestation in the Chiriquí	Panama, USA
Fuel switching	City of Deçin: Fuel Switching for District Heating	Czech Republic, USA
Renewable energy	Bio-Gen Biomass Power Generation Project, Phase I	Honduras, USA
Renewable energy	Bio-Gen Biomass Power Generation Project, Phase II	Honduras, USA
Renewable energy	Kilung-Chuu Micro Hydel, Bhutan	Bhutan, Netherlands

# III. OFFERS OF ACTIVITIES

45. This section reproduces only new offers received since FCCC/SBSTA/1997/INF.2. The list of all offers is available on the UNFCCC website.

#### Uzbekistan

(contact: see section "National Contact Information")

1. TASHKENT Utilisation of domestic wastes
This project involves construction of a combined
heat and power station incinerator for the burning
of domestic and agricultural wastes. The
functioning prototypes exist in Denmark.

Total cost: \$US 65,000.

Duration: 5 years. Benefits: Reduction of CO<sub>2</sub> emissions from uncontrolled burning of domestic wastes, reduction of smoke and methane emission, removal of domestic waste collectors from the territory. Participants: Ministry of Municipal Service of the Republic of Uzbekistan, Glavgidromet.

# 2. Biomass gasification

This project involves handling and adaptation of gasification technology to the local biomass resource, and, in particular, production of biomass from the solid domestic waste, active silt, and cattle breeding wastes in Uzbekistan. Prototypes exist in Sweden, USA, and Canada.

Module cost: \$US 70,000.

Duration: 5 years.

Benefits: Gasification of 1 ton of biomass corresponds to the reduction of 1.5 tons of CO<sub>2</sub> biomass which equals 0.5 toe of fossil fuel. It is planned to reduce CO<sub>2</sub> emissions per 80,000 ton on one installation for the designed reprocessing of 55,000 tons of biomass.

*Participants:* Ministry of Municipal Service of the Republic of Uzbekistan, Glavgidromet.

# 3. <u>Creation of monitoring system for the heat power stations emissions</u>

The objective of this project is the creation of equipment for the permanent measurement of emissions concentrations during the burning of different types of fuel by the heat power stations of Uzbekistan. *Total cost* will be estimated after definition of range of usage. *Duration:* 5 years. *Benefits:* Controlling the amount and concentration of emissions from the use of different types of fuel in energy production in Uzbekistan. *Participants:* Ministry of Energy and

Participants: Ministry of Energy and Electrification of the Republic of Uzbekistan, Glavgidromet.

4. Combined wind-solar energy complex
The goal of this project is the provision of the reliable energy supply for the remount self-sufficient telecommunication objects of Uzbekistan (radio- and tele-transmitters) using the combined wind-solar energy source.

Modula post (5 kmt): \$US 90,000

Module cost (5 kwt): \$US 90,000.

Duration: 5 years. Benefits: Reduction of 3.5 tons CO<sub>2</sub> emissions of each diesel-generator, decrease of anthropogenic load on environment.

Participants: Ministry of Communication of the Republic of Uzbekistan, Research Centre of Ministry of Communication, Glavgidromet.

5. Autonomous heating and power supply The goal of this project is the creation and preparation of industrial production of autonomous source of energy and hot water supply for heating and domestic needs on the base of Stirling engine. Total cost: \$US 550,000. Duration: 5 years. Benefits: Total utilisation of heat produced by the fuel burning and 6 tons reduction of CO, emission per year for each installation. The number of potential users of autonomous power installations in the Republic of Uzbekistan is more than 1 million. Participants: Academy of Sciences of the Republic of Uzbekistan, Ministry of Municipal Service of the Republic of Uzbekistan, Ministry of Water Economy and Agriculture of the Republic of Uzbekistan, Glavgidromet.

# 6. Set of power generation equipment for ecologically sound livestock farm (demonstration project)

The aim of this project is the creation of combined Stirling generator for the complex energy supply including power, hot water and cold conditions provided for dairy farm with 50 head of cattle. This set includes bio-gaseous device combined Stirling generator, solar water heating devicescollectors. Combined Stirling engine uses the produced bio-gas and solar energy and fully provides for the farm's needs in hot water, cold and partially, in power. Total cost: \$US 160,000. Duration: 5 years. Benefits: Reduction of CO<sub>2</sub> and methane emissions, bio-gas utilisation, ecological cleanliness of the farm. Participants: Academy of Sciences of the Republic of Uzbekistan, Ministry of Water Economy and Agriculture of the Republic of Uzbekistan, Glavgidromet.

# 7. <u>Preservation of heat energy and control for</u> pollutants monitoring in Tashkent

This project involves the assessment of the existing system of heat production and monitoring of emissions in the atmosphere in Tashkent and working out of economical and legislative regulating standards for the optimum heat use and improvement of the monitoring system of atmosphere quality in Tashkent.

Total cost: \$US 50,000. Duration: 3 years.

Total cost: \$US 50,000. Duration: 3 years.

Benefits: 20 million tons reduction of CO<sub>2</sub>
emissions and toxic compounds from the burning of fossil fuel in heat power stations, and working out of proposals on the legislative documents on the protection of the environment.

Participants: Ministry of Municipal Service of the Republic of Uzbekistan, Ministry of Energy and Electrification of the Republic of Uzbekistan, Glavgidromet.

#### 8. <u>Demonstration project</u>

The objective of this project is to demonstrate the possibilities and benefits of the solar and wind energy use in rural and remote areas of the Republic of Uzbekistan, the assessment of the existing system of heat production and consumption in remote areas of Karakalpakistan and working out of proposals on the wide use of the solar and wind energy for the heating and lighting of the working buildings and houses in the example of 5 rural areas of Karakalpakistan. Total cost: \$US 90,000. Duration: 3 years. Benefits: reduction of emission GHGs and toxic gases from the burning of the fossil fuel and biomass, development of strategy of non-traditional energy sources used for the rural areas of the Republic of Uzbekistan. Participants: Ministry of Water Economy and Agriculture of the Republic of Uzbekistan, Glavgidromet.

#### IV. NATIONAL CONTACT INFORMATION

46. Listed below are the contact points for entities authorized to accept, approve or endorse activities implemented jointly and to report on them to COP. National focal points<sup>1</sup> to the UNFCCC are marked by (NFP).

#### Albania (NFP):

Committee of Environmental Protection

Rr. B. "Curri" Nr. 9 Tirana, Albania

Tel.: (355-42) 6-5229/30682 Fax: (355-42) 66-5229 E-Mail: cep@cep.tirana.al

#### Algeria (NFP):

Ministry of State, Local Collectivities and Environment

Mr. Ramdane Sid Ali

Directeur de la Préservation de la Biodiversité et des Espèces Naturelles

Director of the Preservation of Bio-diversity and Natural Species

Algiers , Algeria Tel.: (213-2)65-2822 Fax: (213-2)65-3997

# Angola (NFP):

Ministry of Environment

Rua Frederico Engels, Edificio 92 Predio da Mutamba, 3 And, C.P. 1061

Luanda, Angola

Tel.: (244-2)33-4709/-4683 or 39-5844

Fax: (244-2)33-2611

#### Antigua and Barbuda (NFP):

Permanent Mission of Antigua and Barbuda to the United Nations, New York

610 Fifth Avenue, Suite 311

New York NY 10020, United States of

America

Tel.: (1-212)541-4117 Fax: (1-212)757-1607

#### Australia:

AIJ Australia Office

Department of Primary Industries and

Energy

Edmond Barton Building Barton, ACT 2600, Australia

Tel: (61-6) 272-4791 or (61-6) 272-4791

Fax: (61-6) 271-5699

E-mail: aij\_australia@regate.dpie.gov.au AIJ National Programme Web Site: Australian Initiative on Activities

Implemented Jointly

# Austria (NFP):

Federal Ministry for the Environment, Youth and Family Affairs

Stubenbastei 5

A-1010 Wien , Austria Tel.: (43-1)5-1522-1737 Fax: (43-1)5-1522-7810

# Azerbaijan (NFP):

State Committee for Hydro-meteorology

3 Resul Rza Str.

370000 Baku, Azerbaijan Tel.: (994-12)93-9500 Fax: (994-12)93-6937

According to the message from the Executive Secretary on arrangements for communication and liaison with Parties to the Convention dated 8 May 1996, the national focal point should be able to accept, approve or endorse activities implemented jointly and report on them to the COP through the secretariat. Parties are encouraged to identify their national focal points and inform the secretariat accordingly. Additional information on national focal points may be obtained from the CC:INFO booth or by contacting Mr. Horacio Peluffo, External Relations Officer.

Page 11

#### Bahamas (NFP):

Bahamas Environment, Science and

**Technology Commission** 

P.O. Box 10980

Nassau, Bahamas

Tel.: (1-242)327-4691/3

Fax: (1-242)327-4626

#### **Belize:**

Ministry of Energy, Science, Technology and

**Transportation** 

Mr. Carlos Fuller

Chief Meteorologist

Power Lane

Belmopan, Belize

Tel.: (08) 22817 or 22435

Fax: (08) 23317 or 23677

#### **Bhutan (NFP):**

**National Environment Commission** 

Dechen Tsering Gyaltshen

P.O. Box 466

Thimphu, Bhutan

Tel.: (975-2)2-3384/2-4323

Fax: (975-2)2-3385

#### **Bolivia:**

Ministerio de Desarrollo Sostenible y Medio

Ambiente

Ministry of Sustainable Development and

Environment

Ave. Arce No. 2147

Casilla No. 12814

La Paz, Bolivia

Tel: 372063 or 372378

Fax: 392892

#### Botswana (NFP):

Ministry of Works, Transport and

Communications

Ms. Gladys Ramothwa

Director of the Department of

Meteorological Services

P. O. Box 10100

Gaborone, Botswana

Tel.: (267)356-281 or (267)356-284

Fax: (267)356-282

# **Bulgaria:**

Ministry of Environment

67, William Gladstone Str.

BUL-1000 Sofia, Bulgaria

Tel.: (359-2)81-6151 (ext. 267 or 258)

Fax: (359-2)52-1634

#### **Burkina Faso (NFP):**

Ministry of Environment and Water

03 B.P. 7044

Ouagadougou 03, Burkina Faso

Tel.: (226)31-2464

Fax: (226)31-6491

E-mail:

HONADIA@CONAGESE.MEE.BF

#### Cambodia (NFP):

Ministry of Environment

48, Samdech Preah Sihanouk Tonl Bassac, Chamkarmon

Phnom Penh, Cambodia Tel.: (855-23)42-7894

Fax: (855-23)42-7844

#### Cameroon (NFP):

Ministry of Environment and Forestry

Roger Tonleu P.O. Box 6399

Yaounde, Cameroon

Tel.: (237)23-9461

Fax: (237)23-9461

#### Canada:

Canadian Joint Implementation Initiative

(CJII)

Mrs. Anne Boucher

Natural Resources Canada

CJII office, 19th floor

580 Booth St.

Ottawa, Ontario, K1A 0E4 Canada

Tel: (613) 996-2921

Fax: (613) 947-6799

E-mail: CJII@es.nrcan.gc.ca

# **Central African Republic (NFP):**

Ministry of Environment, Water, Forests,

Hunting and Fishery

B.P. 830

Bangui, Central African Republic

Tel.: (236)61-4110/7921

Fax: (236)61-5711 or 61-6700

# Chile (NFP):

Ministry of Foreign Affairs

Catedral 1158 Santiago, Chile

Tel.: (56-2)698-0301

Fax: (56-2)699-4202

Page 12

#### China (NFP):

Ministry of Foreign Affairs 225, Chaonan Street Beijing 100701, China Tel.: (86-10)6596-3200 Fax: (86-10)6596-3209

#### Colombia (NFP):

Colombian Ministry for Foreign Affairs Calle 10 No. 5-51

Office (105)

Santa fe de Bogota, Colombia

Tel.: (57-1)281-1303 Fax: (57-1)337-0578

#### Congo (NFP):

Ministry for Tourism and Environment

Pierre Mbouyou

Directeur

50, rue Balou Constant B.

B.P. 456

Brazzaville, Congo Tel.: (24-2)83-3046 Fax: (24-2)83-7150

#### Costa Rica:

Oficina Costarricense de Implementación Conjunta (OCIC)

Costa Rican Office for Joint Implementation

Mr. Franz Tattenbach (National

Coordinator)

Mr. Adalberto Gorbitz (General Manager)

**CINDE** Building

La Uruca

San José, Costa Rica Tel: (506) 220-0036 Fax: (506) 290-1238

E-mail: crocic@sol.racsa.co.cr

#### Cuba (NFP):

Meteorological Institute of Cuba Apartado Postal 17032

C.P. 11700 Habana 17, Cuba Tel.: (53-7)33-8010/ 621051 Fax: (53-7)33-8010 or 61-7168 E-Mail: meteoro@ceniai.cu

#### **Cyprus (NFP):**

Ministry of Agriculture, Natural Resources and Environment

CY-1411 Nicosia, Cyprus Tel.: (357-2)30-2883 Fax: (357-2)36-3945

#### **Czech Republic:**

"Focal Point AIJ CR"

Ministry of the Environment International Relations Department

Vrsovická 65

100 10 Prague 10, Czech Republic

Tel: (42-2) 67122361 Fax: (42 2) 739411 E-mail: alex@env.cz

# Democratic Republic of the Congo (NFP):

Ministry of the Environment, Nature

Conservation and Tourism

15, Avenue Papa ILEO, Zone de la

Gombe B.P. 12348

Kinshasa, Democratic Republic of the

Congo

Tel.: (243-12)3-4390 or (243-88)3-4390 Fax: (1-212)376-9466 or (243-88)4-3675

#### Denmark (NFP):

Danish Environmental Protection Agency

Ulrik Torp Senior Adviser 29, Strandgade

DK-1401 Copenhagen K, Denmark Tel.: (45)3266-0100 or (45)3266-0346 Fax: (45)3266-0479 or (45)3266-0462

#### **Ecuador (NFP):**

Ministry of Foreign Affairs

Avenida 10 de Agosto y Carri¢n

Quito, Ecuador

Tel.: (593-2)56-1215 or 56-1040 Fax: (593-2)50-7077 or 50-4933 E-Mail: suborint@mmrree.gov.ec

#### Egypt (NFP):

Egyptian Environmental Affairs Agency

17 Teiba Street

El-Mohandeseen/Dokki

Cairo, Egypt

Tel.: (20-2)360-1191/349-6458

Fax: (20-2)361-0764

#### Eritrea (NFP):

Eritrean Agency for the Environment

Naigzy Gebremedhin Senior Advisor P.O.Box 5713 Asmara, Eritrea

Tel.: (291-1)18-1324 Fax: (291-1)18-2418

Page 13

#### Estonia (NFP):

Ministry of Environment Toompuiestee 24

> EE-0100 Tallinn, Estonia Tel.: (37-2)6262-841 Fax: (37-2)6262-845

#### Ethiopia (NFP):

National Meteorological Services Agency

P.O. Box 1090 Addis Ababa, Ethiopia

Tel.: (251-1)51-2299 ext. 254

Fax: (251-1)51-7066

#### France:

Caisse française de développement

Fond Français pour l'Environnement Mondial Secrétariat de mise en oeuvre

Conjointe Jean Labrousse

35, rue Boissy d'Anglas

75379 Paris CEDEX 08 France

Tel: (33) 1 40 06 35 82 Fax: (33) 1 40 06 32 48

#### Gambia (NFP):

Department of Water Resources

7, Marina Parade Banjul, Gambia Tel.: (220)22-8216 Fax: (220)22-5009

# Georgia (NFP):

Ministry of Natural Sources and Environmental Protection

Department of Hydrometeorology

Mr. Tengiz Gzirishvili

Deputy Chairman of the Department of

Hydrometeorology 150 Agmashenebeli Ave. Tibilisi, 380012, Georgia

Tel.: (995-32) 922140

Fax.: (995-32)955006 or (995-32)941536

E-mail: ggc@iberiapac.ge

#### Germany:

The Federal Ministry for the Environment, Nature Conservation and Nuclear Safety

Joint Implementation Coordination Office

Franzjosef Schafhausen Head of Division Bernkasteler Strasse 8 53175 Bonn, Germany

Tel.: (49-228) 305-2350 Fax.: (49-228) 305-3338

E-mail: g16-2004@wp-gate.bmu.de

#### Greece:

Ministry for the Environment, Physical

Planning and Public Works

Department of International Relations and

E. U. Affairs

17, Amaliados Street 115-23 Athens, Greece

Tel.: (30-1) 6411717 or (30-1) 6435740

Fax.: (30-1) 6434470

#### **Guatemala:**

**FUNDESA** 

Diagonal 6, 10-65 zona 10

Centro Gerencial Las Margaritas, Torre I,

nivel 4, oficina 402 Tel: (502) 332-7952 to 56 Fax: (502) 332-7958

E-mail: investiguat@guate.net

# Guinea (NFP):

National Environment Directorate

Joseph Sylla Chef de Section B.P. 3118 Conakry , Guinea Tel.: (224)46-4850

Fax: (224)46-4839

#### Guinea-Bissau (NFP):

National Meteorological Service

Manuel de Alvarenga Directeur C.P. 75

1001 Codex Bissau, Guinea-Bissau

Tel.: (245)20-2059 Fax: (245)20-2059

Page 14

#### **Honduras:**

Ministry for the Environment,

Secretaría de Estado en el Despacho del

Ambiente (SEDA)

Sub-Secretaría del Ambiente

Apartado Postal 309 Tegucigalpa, Honduras

Tel.: (504)37-5664/5667 or 38-5308

Fax: (504)32-1828

E-mail: szelaya@sdnhon.org.hn or

cmbclim@sdnhon.org.hn

#### **Hungary (NFP):**

Ministry for the Environment and Regional

Department of Environmental Strategy

Fö utca 2250

H-1011 Budapest, Hungary

Tel.: (36-1)457-3300 Fax: (36-1)201-4133

#### Indonesia (NFP):

State Ministry of Environment

Aca Sugandhy

Assistant Minister for Environment

Jalan D.I. Pandjaitan Kav. 24

Kebon Nanas, Jatinegara

Jakarta 13410, Indonesia Tel.: (62-21)858-0110 or 0104

Fax: (62-21)858-0110 or 0105

E-mail: sjwadana@indo.net.id

#### Iran (Islamic Republic of) (NFP):

Ministry of Foreign Affairs

Tehran, Iran (Islamic Republic of)

Tel.: (9821)321 2668 Fax: (9821)67 4176

#### Ireland:

Department of Environment,

Mr. Donal Enright

**Custom House** 

Dublin 2. Ireland

Tel.: (35-31)6793377

Fax.: (35-31)8742423 or 874-2710

# Italy (NFP):

Ministry of Environment

Via della Ferratella in Laterano 33

I-00184 Rome, Italy

Tel.: (39-6)702-9210/7725-7018

Fax: (39-6)7725-7016

#### Japan:

Inter-Ministerial/Agency Coordination

Committee for AIJ (IMACC)

Secretariat Mr. Yuichi Kitamura

2-2-1 Kasumigaseki

Chiyoda-ku

Tokyo 100 - Japan

Tel.: (81-3)3580-5012

Fax.: (81-3)3580-5011

E-mail: yuichi.kitamura@mofa.go.jp

#### Kazakhstan (NFP):

Agency for Hydro-meteorology and Natural

**Environment Monitoring** 

597 Seifullin Pr.

480072 Almaty, Kazakhstan

Tel.: (7-3272)54-2285/62-3980

Fax: (7-3272)54-2285/69-6500

E-Mail: general@kaznigmi.alma-ata.su

#### Kenya (NFP):

National Environment Secretariat

P.O. Box 67839

Nairobi, Kenya

Tel.: (254-2)218095/21-8079/22-9261

Fax: (254-2)21-6951/24-2887/21-4175

#### **Kuwait (NFP):**

**Environment Protection Council** 

P.O. Box 24395

Safat 13104, Kuwait

Tel.: (965)215-6831 or 245-6834

Fax: (965)482-1282

#### Latvia (NFP):

Ministry of Environment Protection and

Regional Development

Mrs Ingrida Apene

Senior Desk Officer

25 Peldu Str.

Riga LV 1494, Latvia

Tel: (371 7) 026 508

Fax: (371 7) 820 442

E-Mail: erna@varam.gov.lv

# **Lebanon (NFP):**

Ministry of Environment

Rola Nasreddine

P.O. Box 70-1091

Antelias, Lebanon

Tel.: (961-1)52-1030/6

Fax: (961-1)52-1037/8

Page 15

#### Lesotho (NFP):

Meteorological Services

Bruno Sekoli

Principal Meteorologist

P.O. Box 772

Maseru 100, Lesotho

Tel.: (266)31-7250 or 32-5041 Fax: (266)35-0325 or 32-5057

#### **Liechtenstein (NFP):**

Office for Foreign Affairs

Heiligkreuz 14

FL-9490 Vaduz, Liechtenstein

#### Lithuania (NFP):

Ministry of Environmental Protection

A. Juozapaviciaus 9 2600 Vilnius, Lithuania

Tel.: (370-2)72-5868 Fax: (370-2)72-8020 E-Mail: info@nt.gamta.lt or danius.lygis@nt.gamta.lt

# Luxembourg (NFP):

Ministry of the Environment

18, Monte de la Petrusse

L-2918 Luxembourg, Luxembourg

Tel.: (352)478-6824 Fax: (352)40-0410

#### **Mauritius (NFP):**

Ministry of the Environment and Quality of Life

Ken Lee Tower, 10th floor

Barracks & St. Georges Streets

Port Louis, Mauritius Tel.: (230)212-7175 Fax: (230)212-9407

or

Meteorological Services

St. Paul Road

Government Quarter's No 18

Vacoas, Mauritius Tel.: (230)696-5626 Fax: (230)686-1033 E-Mail: meteo@intnet.mu

#### Mexico:

Instituto Nacional de Ecología

(INE-SEDESOL)

National Institute of Ecology

Dr. Carlos Gay

Coordinator de la Unidad de Cooperación

y Convenios Internacionales Av. Revolución 1425 Torre Ejecutiva nivel 31 Colonia Tlacopac San Angel

C.P 01040 Mexico, D.F.

Tel: (525) 624-35-46 or 43 Fax: (525) 624-35-93

E-Mail: cgay@servidor.unam.mx or

jmtz@correo.uam.mx

#### Moldova, Republic of (NFP):

National Hydrometeorological Service

Grenoble str. 193

2043 Kichinev, Moldova, Republic of

Tel.: (3732)77-3611/ 3500 Fax: (3732)77-3636 E-Mail: mae3@cni.md

#### Monaco (NFP):

Directorate of External Relations

"Villa Girasole"

16, boulevard de Suisse MC-98000 Monaco, Monaco

Tel.: (377-93)15-8333 / 301717

Fax: (377-93)15-8888

#### Morocco (NFP):

Ministry of Environment

Bani Layachi

Directeur de l'Observation des Etudes et

de

la Coordination 75 rue de Sebou

Agdal

Rabat, Morocco

Tel.: (212-7)68-0743/1500 Fax: (212-7)68-0746

E-Mail: sdnmar@onpt.net.ma

Page 16

#### **Mozambique (NFP):**

Ministry for Coordination of Environmental Affairs

P.O. Box 2020

Avenida Acordos de Lusaka 2115 Maputo, Mozambique

Tel.: (258-1)46-5848 Fax: (258-1)46-5849

E-Mail: micoa@ambinet.uem.mz

#### Myanmar (NFP):

National Commission for Environmental Affairs

37, Khantaman Road Yangon, Myanmar Tel.: (95-1)22-1689 Fax: (95-1)22-1546

#### **Netherlands:**

The Netherlands Pilot Phase Program on Joint Implementation

Mr. Wim Iestra

Ministry of Housing, Spatial Planning

and Environment

Directorate General for Environmental

Protection

Directorate Air and Energy IPC/640

Climate Change Department

P.O. Box 30945.

2500 GX The Hague, The Netherlands Tel.: (31-70) 339-4440 or 339-4437 Fax: (31-70) 339-1310 or 339-1311 E-mail: iestra@DLE.DGM.minyrom.nl

# New Zealand (NFP):

Ministry for the Environment

P.O. Box 10362

Wellington, New Zealand Tel.: (64-4)498-7400

Tel.: (64-4)498-7400 Fax: (64-4)471-0195 or 499-4549

# Niger (NFP):

National Council on the Environment and Sustainable Development

B.P. 10193 Niamey , Niger Tel.: (227) 72-2559

Fax: (227) 72-2581 or 73-5859

or

Ministry of Hydraulics and Environment

Lute contre les pollutions et nuissances

Sani Mahazou Chef de service B.P. 578

Niamey, Niger Tel.: (227)73-3329

Fax: (227)73-2784/73-5591

#### Nigeria (NFP):

Federal Environmental Protection Agency Environment House, Independence Way

South

P.M. Bag 265, Garki Abuja, Nigeria

Tel.: (234-9)523-3368 Fax: (234-9)523-3373

# Norway:

National Pilot Phase Programme

Ministry of Foreign Affairs

Department of Natural Resources and

**Environmental Affairs** 

Mr. Jostein Leiro, Head of Division

P.O. Box 8114 Dep Victoria Terrasse

N-0032 Oslo Dep, Norway Tel.: (47) 22 24 36 08

Fax.: (47) 22 24 30 08

E-mail: jostein.leiro@ud.dep.telemax.no

# Oman (NFP):

Ministry of Regional Municipalities and

Environment

P.O. Box 323 Muscat 113, Oman Tel.: (968)60-2271 Fax: (968)69-2549

#### Panama (NFP):

National Institute of Renewable Natural

Resources

2016, Parasío-Ancón Panama, Panama Tel.: (507)232-6643 Fax: (507)232-6612

#### Peru (NFP):

Ministry of Foreign Affairs

Lampa 535 Lima, Peru

Tel.: (511)225-5369 Fax: (511)225-5370

or

Page 17

National Council of Environment

Av. San Borja Norte 226

San Borga Lima, Peru

Tel.: (51-1)441-7333 Fax: (51-1)441-7334

# **Philippines (NFP):**

Department of Foreign Affairs

Bernarditas De Castro Muller

Director

ADB Building

2330 Roxas Boulevard

Pasay City, Philippines

Tel.: (632)834-4000

Fax: (632)761-3014 or (632)833-1322

#### Poland:

National Found for Environmental Protection

and Water Management, JI Secretariat

Mrs. Jolanta Galon-Kozakiewicz, PhD. Head of JI-Secretariat Konstruktorska 3A

02-673 Warsaw, Poland

Tel.: (4822) 49 22 80 or 49 00 80 ext. 504

Fax: (4822) 49 20 98

E-mail: jolantak@nfosigw.gov.pl

#### Republic of Korea (NFP):

Ministry of Foreign Affairs

Government Building I

77 Sejoing-ro Chongro-Ku

Seoul, Republic of Korea

Tel.: (82-2)720-2329

Fax: (82-2)722-7581

E-Mail: econo@bora.dacom.co.kr

#### Romania:

Ministry of Waters, Forests and

**Environmental Protection** 

Division for Strategies & Regulations for

**Environment Protection** 

Blvd. Libertatii 12,

70005 Bucharest Sector 5, Romania

Tel.: (40-1) 410-0248

Fax: (40-1) 410-0217 or (40-1) 410-021

#### **Russian Federation (NFP):**

Inter-agency Commission of the Russian

Federation on Climate Change Problems

Mr. Alexander I. Bedritzky

Chairman of the Commission

Head of the Russian Federal Service for

Hydrometeorology and Environmental

Monitoring

Novovagankovsky Street 12

Moscow 123242, Russian Federation

Tel.: (7-095)252-3873 or 255-2104 or

(7-095)252-1467

Fax: (7-095)253-9484 or (7-095)255-2216

Telex: 411117 RUMS RU

E-mail: avdushin@hymet.msk.ru

#### Samoa (NFP):

Ministry of Foreign Affairs

P.O. Box L. 1861

Apia, Samoa

Tel.: (685)2-5313

Fax: (685)2-1504

E-Mail: mission.of.samoa@together.org

#### Senegal (NFP):

Ministry of Environment and Protection of

Nature

Bakary Kante

Directeur de l'environnement

23, Rue Calmette

B.P. 6557

Dakar, Senegal

Tel.: (22-1)22-4011 or 21-1240

Fax: (22-1)22-2180

E-Mail: energy@endadak.gn.apc.org

#### **Seychelles (NFP):**

Meteorological Services

Luc Chang-Ko

Director

P.O. Box 181

Mahe, Seychelles

Tel.: (248)37-3001

Tel.: (248)37-3001

Fax: (248)37-3222

or

Ministry of Foreign Affairs, Planning and

Environment

P.O. Box 656

Victoria

Mahe, Seychelles

Tel.: (248)22-4688

Fax: (248)22-4845

E-Mail: mfapesey@seychelles.net

Page 18

#### Slovak Republic (NFP):

Ministry of the Environment Nmestie Ludovta Stura 1

SL-812 35 Bratislava, Slovak Republic

Tel.: (42-7)391-842 Fax: (42-7)391-201

E-Mail: xooomoj@savba.savba.sk

#### Slovenia (NFP):

Hydrometeorological Institute

Vojkova 1b

SL-1000 Ljubljana, Slovenia Tel.: (386-61)32-7461

Fax: (386-61)33-1396

E-Mail: andrej.kranjc@rzs-hm.si

#### **Solomon Islands (NFP):**

Meteorological Service

P.O. Box 21

Honiara, Solomon Islands

Tel.: (677)2-1640 Fax: (677)2-1689

Ministry of Culture, Tourism and

Aviation P.O. Box 21

Honiara, Solomon Islands

Tel.: (677)2-1757 Fax: (677)2-0046

#### **South Africa (NFP):**

**Environmental Affairs and Tourism** 

Michael Laing Director: Climate P/Bag X 097 Pretoria, South Africa

Tel.: (27-12)309-3074/309-3026 Fax: (27-12)309-3979 or (27-12)290-3033

E-Mail: fcccsec@cirrus.sawb.gov.za

# Spain (NFP):

Dirección General de Relaciones Culturales y

Cientificas Calle Atocha, 3 E-28012 Madrid, Spain

Tel.: (34-1)379-9686 Fax: (34-1)531-9366

#### **Suriname:**

Meteorological Service, Ministry of Public

Magnesiumstraat 41 Paramaribo, Suriname Tel.: (597)49-1143 Fax: (597)49-0627

#### Sri Lanka (NFP):

Ministry of Forestry and Environment

6th Floor, Unity Plaza Station Road

Bambalapitiya Colombo 4, Sri Lanka Tel.: (94-1)58-8274 Fax: (94-1)50-2566

E-Mail: envmin@slt.lk

# **Swaziland (NFP):**

Ministry of Public Works and Transport

Emmanuek Dlamini

Director P.O. Box 58

Mbabane, Swaziland Tel.: (268)4-8859/4-6274 Fax: (268)4-1530/4-2364

E-Mail: WEATHER@REALNET.CO.SZ

#### Sweden (NFP):

Swedish National Board for Industrial and Technical Development (NUTEK)

Sune Westermark Lilieholmsvägen 32

S-117 86 Stockholm, Sweden

Tel.: (46-8) 681 95 39 Fax: (46-8) 681 96 67

E-mail: sune.westermark@nutek.se or

gudrun.knutsson@nutek.se Web site: http://www.nutek.se

#### Switzerland (NFP):

Federal Office for Foreign Economic Affairs

Swiss AIJ Pilot Program Secretariat

Anne Arquit-Niederberger

Program Manager

Effingerstrasse 1

CH-3003 Berne, Switzerland

Tel.: (41-31)323 08 85 Fax: (41-31)324 09 58

E-mail:

anne.arquit-niederberger@bawi.admin.ch

Page 19

#### Syrian Arab Republic (NFP):

Ministry of Environment

P.O. Box 3773

Damascus, Syrian Arab Republic Tel.: (96-311)331-0381/333-0510/

221-5426

Fax: (96-311)333-5645

#### Thailand (NFP):

Ministry of Science, Technology and

Environment

60/1 Soi Phibun Wattana 7, Rama VI Rd.,

Phayathai

Bangkok 10400, Thailand Tel.: (66-2)279-0130

Fax: (66-2)270-1661

#### Togo (NFP):

Ministère de l'Agriculture, de l'Elevage et de

la Pèche

B.P. 385

Lomé, Togo

Tel.: (228)21-0305/21-0482

Fax: (228)21-8792

or

University of Benin

Ayitê -Lô Ajavon

Professeur de Chimie Atmosphèrique

B.P. 15 15 Lomê, Togo

Tel.: (228)25-5094 ext. 1305

Fax: (228)21-8595

E-mail:nohende.ajavon@syfed.tg.refer.org

#### Tonga (NFP):

Ministry of Civil Aviation and Meteorological

Service

Saufatu Sopoanga

P.O. Box 845

Nuku'alofa, Tonga Tel.: (676)2-4144

Fax: (676)2-4145

# Trinidad and Tobago (NFP):

Ministry of Foreign Affairs

**Evans King** 

Deputy Director

**KNOWSLEY** 

Queens Park West

Port of Spain, Trinidad and Tobago

Tel.: (1-809)623-4116 to 20

Fax: (1-809)627-0571 or 624-4220

E-Mail: foreign@opus.co.tt

#### Turkey (NFP):

Ministry of Foreign Affairs

Disisleri Bakanligi 06520

Baljat

Ankara, Turkey

Tel.: (90-312)286-6126/285-4615

Fax: (90-312)287-1648

E-Mail: webmaster@mfa.gou.tr

#### **Turkmenistan (NFP):**

Ministry for Natural Resource Use and

**Environment Protection** 

ul. Kemine 102

744000 Ashkhabad, Turkmenistan Tel.: (993-12)25-4317 or 29-6004

Fax: (993-12)51-1613

# Tuvalu (NFP):

Ministry of Civil Aviation, Tourism,

Telecommunications, Meteorology and Postal

Services

Private Mail Bag 054

Port Vila, Tuvalu

Tel.: (678)2-5059

Fax: (678)2-5628

#### **Uganda:**

Department of Meteorology

Crested Towers, P.O. Box 7025

Kampala, Uganda

Tel.: (256-41)25-8574 or 23-3559

Fax: (256-41)25-1797/6166 E-Mail: met@mukla.gn.apc.org

Ministry of Natural Resources

Amber House, P.O. Box 7270

Kampala, Uganda

Tel.: (256-41)23-4733/23-3331

Fax: (256-41)23-0220

# **United Kingdom of Great Britain (NFP):**

Department of the Environment

Room B254

43 Marsham Street

London SW1P 3 P4, United Kingdom of

Great Britain

Tel.: (44-171)276-3000

Fax: (44-171)276-8355

Page 20

#### **United States of America:**

United States Initiative on Joint

Implementation - USIJI

Dr. Robert K. Dixon

Director

**PO-6** 

1000 Independence Avenue, SW

Washington, DC 20585, USA

Tel: (1-202) 586-3288

Fax: (1-202) 586-3485 or -3486

Hotline: (1-202) 586-3467

Email: rdixon@igc.apc.org

#### **Uzbekistan (NFP):**

Main Administration of Hydro-meteorology

Victor Chub

Minister, Chief of Glavgidromet

72, K. Machsumov str.

700052 Tashkent, Uzbekistan

Tel.: (7-371)133-6180/136-0758

Fax: (7-371)133-2025

E-Mail: uzhymet@hmc.tashkent.su

#### Vanuatu (NFP):

Ministry of Civil Aviation, Tourism,

Telecommunications, Meteorology and Postal

Services

Henry Taiki

Director

Private Mail Bag 054

Port Vila, Vanuatu

Tel.: (678)2-2331

Fax: (678)2-3142

#### Venezuela (NFP):

Dirección General Sectorial de Economía y

Cooperación Internacionales, Ministerio de

Relaciones Exteriores

Esquina de Carmelitas

Torre MRE, Piso 14

1010 Caracas, Venezuela

Tel.: (582)83-4666 or 81-6657

Fax: (582)83-1662

\_ \_ \_ \_