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**ACTIVITIES IMPLEMENTED JOINTLY UNDER THE PILOT PHASE**

**Synthesis report on activities implemented jointly**

**Note by the secretariat**

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## I. INTRODUCTION

1. The Convention stipulates that efforts to address climate change may be carried out cooperatively by interested Parties. By its decision 5/CP.1, the Conference of the Parties (COP), at its first session, decided to establish a pilot phase for activities implemented jointly (AIJ) among Annex I Parties and, on a voluntary basis, with non-Annex I Parties that so request.
2. Through the same decision the COP requested the Subsidiary Body for Scientific and Technological Advice (SBSTA) and the Subsidiary Body for Implementation (SBI) to prepare, with the assistance of the secretariat, a synthesis report for consideration by the COP (decision 5/CP.1, para. 2(c)). On this basis, the COP shall, at its annual session, review the progress of the pilot phase with a view to taking appropriate decisions on its continuation (decision 5/CP.1, para. 3(a)). "In so doing, the Conference of the Parties shall take into consideration the need for a comprehensive review of the pilot phase in order to take a conclusive decision on the pilot phase and the progression beyond that, no later than the end of the present decade" (decision 5/CP.1, para. 3(b)).
3. The present document contains a synthesis prepared by the secretariat in response to the request by the COP and is intended to support the SBSTA and the SBI in the preparation of their synthesis report and recommendations to the COP. This synthesis is based on reports by Parties on national programmes for AIJ under the pilot phase as well as on specific AIJ.
4. In accordance with the criteria for reporting under the AIJ pilot phase, this synthesis reflects only those AIJ for which reports have been received, either jointly or separately, from all designated national authorities (DNA) of Parties participating in an activity as indicated in annex IV of document FCCC/SBSTA/1996/8. For an activity to be considered as an activity implemented jointly under the pilot phase, it needs, at least, to be reported as being accepted, approved or endorsed by all the DNAs involved. Table 1\* contains the list of activities implemented jointly. It is noted that the list differentiates, with the help of the column entitled "Report submission", between reports that have been submitted in time for consideration in this synthesis (39 activities) and those which were submitted after the deadline (23 activities, identified by an "x" in the "1997 late" sub-column only). Three AIJ of the 39 considered in this synthesis were only reported as accepted, approved or endorsed. Of the 39 AIJ, 25 were reported in accordance with the Uniform Reporting Format (URF) adopted by the SBSTA at its fifth session in March 1997, and 11 AIJ, submitted prior to that adoption, in accordance with the initial reporting framework. The existence of two different formats, and the fact that Parties had only a few weeks between March and the submission deadline of 30 June 1997 for preparing reports in accordance with the URF, account for a certain lack of homogeneity in the scope and detail of reporting by Parties.

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\* All tables referred to in this document are contained in document FCCC/SBSTA/1997/12/Add.1.

## II. MAIN CONCLUSIONS

5. The participation of Parties in AIJ programmes and activities, which fully satisfy the criteria established by the COP, is slowly expanding. Twelve Parties submitted reports on national programmes for AIJ under the pilot phase in 1997, twice as many as in 1996. A similar trend is discernible for AIJ. With stricter reporting standards in effect, duly endorsed reports for consideration in the synthesis report were submitted on 39 activities, involving 11 countries. Yet, even though this is a limited base for drawing conclusions, a gradual expansion of activities which meet all AIJ and reporting criteria is discernible.

6. Since many programmes and activities are at an early stage, most Parties are still in the process of gaining experience. Their reports are, therefore, necessarily limited in coverage. A detailed consideration of the programmes and activities on which reports were received allows, however, some preliminary conclusions. They are as follows:

(a) The bulk of current AIJ is between Annex I Parties, with host countries being economies in transition (EIT). Only three non-Annex I Parties have AIJ of which nine activities are in Latin America and the Caribbean and one activity is in Africa. The regional concentration is even more pronounced considering that, of a total of 39 activities, 18 involve the same two Annex I Parties (Latvia and Sweden) and that one country in the Latin American and Caribbean region (Costa Rica) hosts eight of the ten activities in non-Annex I Parties;

(b) The total amount of greenhouse gases (GHG) estimated to be reduced or sequestered by 39 activities considered is distributed over the various types of activities. Six forestry preservation and afforestation activities account for 57 per cent of the abatement impact and 34 per cent are attributable to one fugitive gas activity. Twenty-nine activities related to energy account for 9 per cent of the GHG abatement effect. Most AIJ under the pilot phase are relatively small in terms of investment and their individual contribution to GHG abatement is limited. A more significant effect would, however, be achievable through the replication of such projects;

(c) At this early stage of the pilot phase, most data on the costs and the amount of GHG abated are only estimates and are, therefore, not a suitable basis for analysis;

(d) The financing sources of AIJ are often described in detail. In some cases, funding for reported AIJ does not seem to be secured. In cases of multiple sources of funding, it appears important that reports establish financial additionality with regard to the financial obligations of Annex II Parties within the financial mechanism, as well as current official development assistance flows;

(e) Participating Parties use the pilot phase to gradually acquire procedural and institutional experience while achieving mitigation effects. Investor as well as host Parties have gained experience, for example in the application of criteria in support of decision 5/CP.1, and

have developed additional criteria to reflect national priorities. Host Parties which set up an AIJ unit appear to be successful in attracting financial resources and in ensuring their utilization in priority areas of national development. An increasing number of Parties are designating national focal points for AIJ and indicating interest in technical workshops, seminars and conferences on AIJ;

(f) Parties, however, appear to be approaching the pilot phase cautiously. Information on the AIJ mechanism is insufficiently disseminated in developing as well as developed countries, and incentives appear inadequate. This may explain the hesitation of the private sector to invest in a significant manner.

7. The reports which have been considered for this synthesis report show variations in structure and coverage. This variability in reporting quality may be due to the relatively short time available to Parties for preparing the reports in accordance with the URF and/or the possible lack of guidance as to the level of detail expected. The development of guidelines providing definitions of terms, descriptor lists and specification of reporting requirements could prove useful. The following specific problems were encountered:

(a) Environmental, social/cultural and economic benefits are generally not described in a detailed manner. Virtually no negative impacts are reported. Some Parties, being aware of this limitation, indicated that future reports would be more specific, and that resources would be allocated to provide improved information; and

(b) The basis for calculating costs and GHG mitigation effects is often insufficiently explained. Further, definitions of the costs of the AIJ component and other reporting items, such as the lifetime of the activity and technical data, are not consistent. While the essential methodological elements for calculating GHG reductions are stated, the information supplied by Parties does not always allow replication.

8. The information received reveals the need to further clarify the approaches to the methodological issues adopted by the SBSTA at its fifth session. These include:

(a) determination of environmental benefits; (b) modalities for measurement, reporting and assessment; (c) endogenous capacity-building; (d) transfer of environmentally-sound technologies and know-how; (e) considerations of costs; (f) modalities for mutually beneficial incentive structures for involved Parties, acknowledging that there are no credits under the pilot phase; and (h) institutional arrangements.

### **III. SYNTHESIS OF NATIONAL AIJ PROGRAMME REPORTS**

9. Parties are invited to submit information using the URF for national programmes on AIJ under the pilot phase, including contact information for the DNA for AIJ, descriptions of the programme structure and features as well as the process for obtaining approval including procedure and criteria, and a summary of activities. In order to compare main features of various national programmes, summarized information on key aspects is presented in tables 1 and 2. Detailed information contained in those programme reports, which were received in electronic format, is available on the UNFCCC world wide web site\*\* and through the UNFCCC CD-ROM.

10. Of the nine Parties which submitted AIJ programme reports for this document, six did so for the first time (Costa Rica, Japan, Mexico, Poland, Sweden and Switzerland) while three Parties provided updates of the programme reports submitted in 1996 (Germany, Norway and the United States of America). Those Parties for which no updates were received are marked with an asterisk (Australia, Canada and the Netherlands).

11. All twelve Parties report to have developed criteria which emphasize certain aspects of the pilot phase. Eleven Parties state that emission reductions, and, in that context, baseline calculations, must be verifiable. Four Parties require that proposals contain verification and/or monitoring plans. The periodic reassessment of the emission reductions and their estimates, as well as the sustainability of emission reductions, are criteria for six Parties, respectively. Eight Parties require the explicit analysis of environmental impacts. Social impacts are specifically taken into consideration by five Parties. Three Parties mention the need for training components to be included in AIJ. One host Party indicates that while AIJ comprising exclusively technical assistance, education or training activities are valuable forms of foreign aid, they may not qualify as joint implementation activities. Concerning their special focus during the pilot phase, two Parties point to emission reduction activities and one Party to small, quickly implementable activities. One host Party focuses on new financial mechanisms to direct AIJ.

### **IV. SYNTHESIS OF REPORTS ON AIJ**

12. The synthesis covers 39 AIJ for which reports were submitted prior to the deadline of 30 June 1997. Regarding three activities, only the approval, acceptance or endorsement by all the designated national authorities involved has been reported. Eleven reports were submitted prior to the adoption of the URF.

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\*\* Open the UNFCCC site at <http://www.unfccc.de>, proceed following the link to CC:INFO Products and to CC:INFO/AIJ.

13. The reports are summarized in accordance with the structure of the URF. The headings hereafter reflect the respective URF heading followed by the URF section number in brackets.

**A. Description of projects (A.)**

1. Title of the project (A.1)

14. Table 1 contains the list of activities implemented jointly. Each activity listed has been reported as accepted, approved or endorsed by the relevant DNAs involved. This list shows the AIJ considered in this synthesis as well as those activities for which information, in accordance with the reporting criteria, has been submitted after the deadline.

2. Participants/actors (A.2)

15. The number of reported participants per activity range from two to six. The participants involved in the activities included academic institutions, private sector enterprises, non-governmental organizations, governmental agencies, the World Bank (WB) and the Global Environment Facility (GEF). The functions within the AIJ described for the host country participants included: acting as a government contact for activity implementation, ownership of the facility at the activity site, local investor and developer, agencies that are responsible for reporting on and implementing AIJ, emissions testing, and activity evaluation. The functions of the investor country participants focussed primarily on financial and technical roles. The specific functions listed for the investor country participants included: management and administration of the AIJ, financing of the monitoring costs, scientific monitoring, project management/transfer of know-how, and technical support. However, no detailed standard information regarding the role and activities of the participants is available.

3. Activity (A.3)

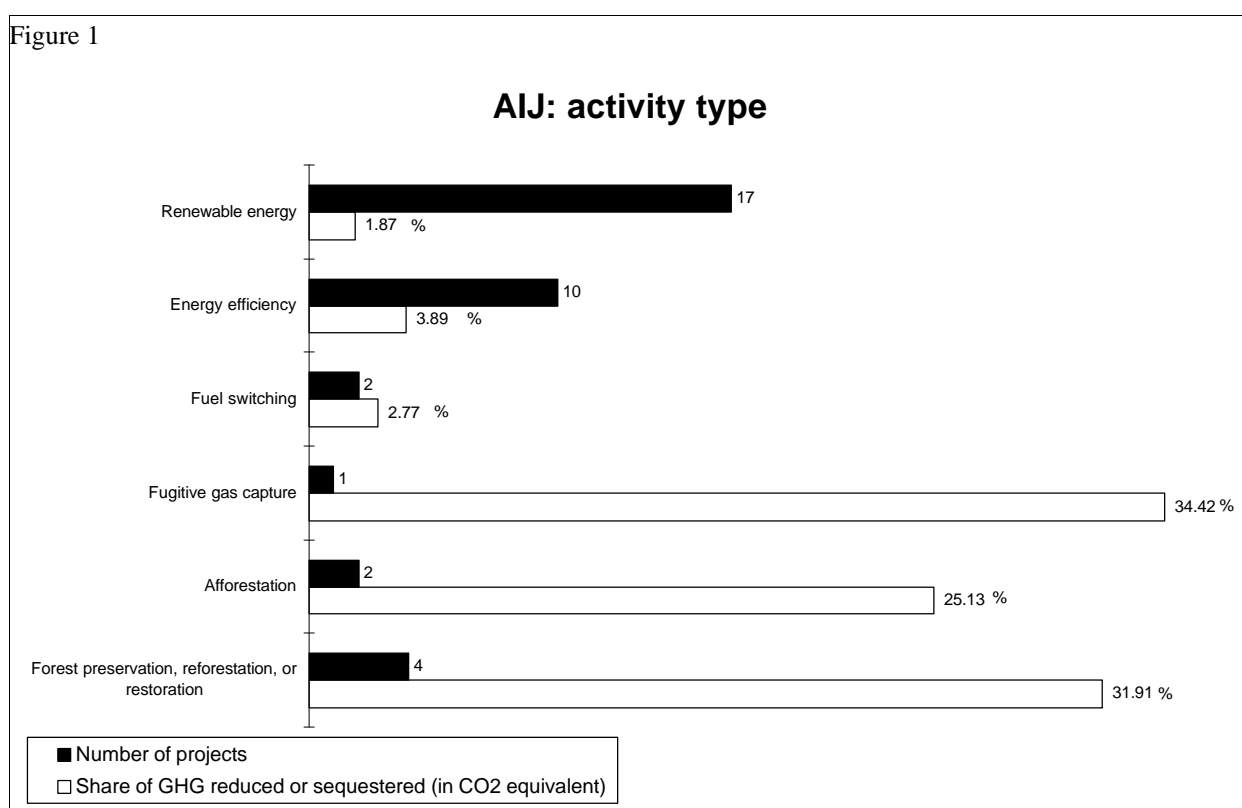
16. The following details are to be reported in this section: (a) a general description of the activity; (b) a classification of activities by type; (c) an identification of the location; (d) an expected starting and ending date as well as the lifetime of the activity, if different; (e) the present stage of the activity; and (f) technical data.

17. In accordance with the sectors identified by the IPCC, activities can be classified as follows: 10 in energy efficiency, 17 in renewable energy, 2 in fuel switching (1 in the transport sector, and 1 in the energy sector), 4 in forest preservation restoration, or reforestation, 2 activities on emissions/sequestration from afforestation and 1 in fugitive gas capture were reported. To date none of the following types have been reported on: industrial processes, solvents, agriculture, waste disposal or bunker fuels.

18. Figure 1 below shows the total number of activities of a specific type related with the share of GHGs reduced or sequestered, expressed in CO<sub>2</sub> equivalent. It is noted that 3 activities

did not provide data used for this comparison (one in each of the following types: energy efficiency, fugitive gas and forest preservation restoration, or reforestation); 6 forestry preservation and afforestation activities account for 57 per cent of the GHG abatement impact, while 34 per cent is attributable to one fugitive gas activity; 17 renewable energy activities account for 2 per cent of the GHG abatement effect; 2 fuel switching activities account for 3 per cent and 10 energy efficiency activities account for 4 per cent of the total GHG abatement effect. It may be noted that two Parties have cooperated in a significant number of activities showing a pattern of replication: six activities in energy efficiency (mainly improvement of municipal/district heating systems) and 12 activities in renewable energy (conversion to bio-fuel boilers).

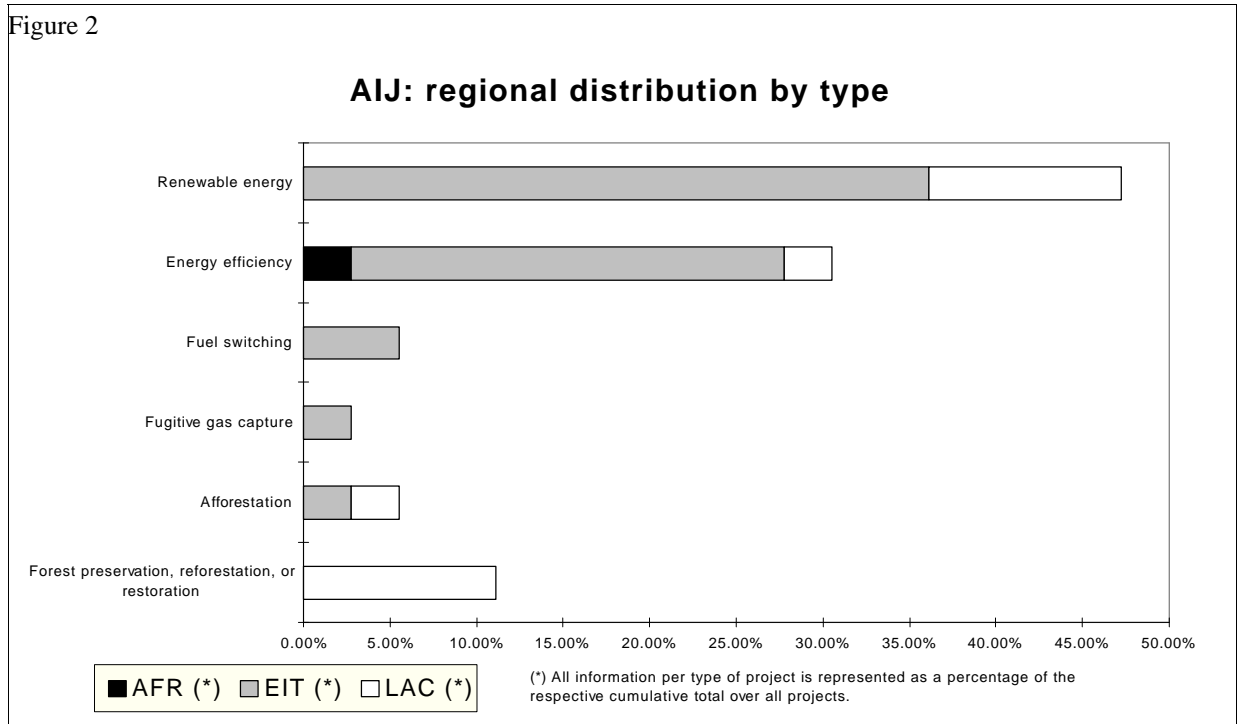
Figure 1



19. The geographical distribution of the activities is still not very balanced. Activities are being carried out, or have been proposed, in several non-Annex II countries and regions, including Burkina Faso, Costa Rica, the Czech Republic, Hungary, Latvia, Mexico, Poland, Romania and the Russian Federation. Of the 39 activities reported, 28 were in economies in transition (EIT), one was in Africa (AFR), and ten in Latin America and the Caribbean (LAC). Another way of looking at the geographical distribution is by type of activity. It appears that activities in the areas of energy efficiency, renewable energy, fuel switching and fugitive gases are mainly implemented in EIT countries while forestry-related activities are mainly implemented in LAC countries (see Figure 2 below).



20. Concerning the stage reached by the activities, reports showed a variety of divergent interpretations of descriptors provided for in the URF thus demonstrating that a more



differentiated and better defined list may be needed. Out of 25 activities, 2 were reported mutually agreed, 4 were in progress, and 19 were completed. For the remaining, either no information was available, or reports had been submitted prior to the adoption of the URF.

21. Concerning starting date, ending date and lifetime of the activities, it is to be noted that clearer guidance is required with regard to the definition of the respective information items. The length of time between starting and ending date differs in most cases from the lifetime of the activity. The lifetime of the activities ranged from below 5 to 25 years, with 5 activities in the below 5 year range, 20 activities in the 6-10 year range, 2 activities in the 11-15 year range, 3 activities in the 16-20 year range, and 6 activities with a lifetime of more than 20 years.

22. The information on the technical data showed a lack of guidance with regard to the expected kind of information and its level of detail. Information provided as technical data included: (a) carbon equivalent calculations regarding the forest to be preserved; (b) policy issues in the conversion from coal to gas; (c) calculations of improved efficiency goals for the activity; (d) data on the energy production; and (e) emissions of energy plants and vehicles such as buses.

4. Cost (to the extent possible)(A.4)

23. All activity reports provided information regarding the determination of cost for the activity. The URF requests information under an item worded, "AIJ component in US\$". Some activity reports provided information on this item on an annual basis. It seems that this item requires a clearer definition or should be reformulated for clarity. Only a few of the reports described the method of their calculations and the data support for the calculations was not consistently provided.

5. Mutually agreed assessment procedures (A.5)

24. Some activity reports described the roles/activities of host country organizations in mutually agreed assessment procedures. Most activities reported local and/or national organizations as responsible for the majority of the scheduled data collection for the activities.

25. With regard to measurement, responsibilities were assigned to national and municipal institutions of the host country and, in some cases, to private organizations of the host country. Assessments were commonly carried out by national public and private organizations of the host country, yet, in one case, by a private company of the investor country. The responsibility to report on AIJ to the DNA was assigned, in some cases, to a private company of the investor country, and in other cases, to private or public organizations in the host country, sometimes with initial support from the investor country organizations. In one case the investor Party provided scientific support to those involved in measurement, reporting and assessment in the host countries.

**B. Governmental acceptance, approval or endorsement (B)**

26. At the moment of finalization of this document, a total of 62 AIJ activities have been reported to the secretariat. That is, all activities have received endorsement by the designated national authorities for activities implemented jointly. For 59 activities, reports have been submitted jointly, that is, one Party submitted the report with the concurrence of the other designated national authority involved in the activity. No separate reports have been submitted for the same AIJ by involved DNAs. Three activities have been reported as approved, accepted or endorsed, but no report has been submitted, and are considered in the present synthesis, where appropriate.

**C. Compatibility with, and supportiveness of, national economic development and socio-economic and environment priorities and strategies (C)**

27. In this section, Parties are invited to report, to the extent possible, whether AIJ are compatible with, and supportive of, national economic development and socio-economic and environment priorities and strategies. The answers are of various types, and again vary in detail.

Some Parties state that the activity is in accordance with, or in support of, a specific national policy. Other Parties describe the national characteristics in a specific sector and how the activities support sector-specific policies at the local or national level. Another group describes the national policy and relevant selection criteria for activities that are in support of such a policy. Some examples of policies or strategies mentioned are sustainable development goals in the areas of forestry and land-use, energy policies, transport policies, and trade balance issues in traditional and non-traditional goods.

#### **D. Benefits derived from the activities implemented jointly project (D)**

28. Qualitative and quantitative information was provided regarding environmental, social/cultural and economic benefits. Nearly all Parties stated benefits in each category, often with quantitative data for environmental benefits for GHG reduction and naming other reductions including SO<sub>2</sub>, N<sub>x</sub>O and particles. Some Parties included other environmental benefits, such as fostering biodiversity, improving water quality and reducing erosion of hydrological resources. The majority of the reports indicated social/cultural benefits, including active involvement of local communities, increased public awareness, maintenance of natural heritage and historical sites, as well as cleaner air. The economic benefits were stated in terms of savings on energy, improved working environment and economic opportunities through the introduction of new technologies. A few Parties included the development of local production capacity through the involvement and/or establishment of local enterprises.

#### **E. Calculation of the contribution of activities implemented jointly projects that 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 (E)**

##### **1. Estimated emissions without the activity (project baseline) (E.1)**

29. The description of the project baseline (baseline) was, in most cases, brief. Some Parties reported baselines that assumed no change in the level of activity, for example, assuming a static, energy/heat consumption over the lifetime of the activity. Other Parties reported a continuation in present trends, for example, assuming declining carbon stocks or unsustainable energy consumption patterns. Assumptions, in some cases, imply that there would be no technological advance or energy efficiency improvements in the absence of the AIJ activity over its lifetime or duration. In one case, the activity was analysed with four possible alternative scenarios for a baseline, depending on the market penetration of a more efficient product. In that case, the future GHG emissions reductions were computed with an "average scenario". The alternatives were not described in detail in the submission received.

## 2. Estimated emissions with the activity (E.2)

30. The description of the scenario and the methodologies applied to calculate the emissions avoided or sequestered were brief. In some cases, secondary effects of implementing an activity were indicated. For example, if in a cogeneration scheme renewables were to replace oil or coal, gas would still be needed for generating the heat component.

31. Due to the early stage of the pilot phase, only a few of the reports provided data for the actual emissions reduced. Only two of the reports provided the projected emission reductions table with yearly calculations for the lifetime of the activity, while the rest of the reports offered yearly data only for the first two years and the last year. The calculations of projected and actual emissions reductions focused primarily on CO<sub>2</sub>. One activity included calculations of emissions reductions for CH<sub>4</sub> and N<sub>2</sub>O, and another activity calculated the emissions reductions of CO, THC (total hydrocarbons), NO<sub>x</sub>, and particle matter (PM).

32. A smaller number of the activity reports provided sufficiently detailed data to allow for the calculations to be easily reproduced. However, most of the calculations for emissions reductions were not described in adequate detail to allow for their replication.

33. Some of the aspects related to the identification of the baseline and the activity scenario such as system boundary and leakage were, in most cases, not sufficiently addressed.

## **F. Financing of activities implemented jointly (...) (F)**

34. The involvement of private investment is still relatively low. In several cases, public funds, especially those established in addition to present official development assistance and contributions to the financial mechanism of the Convention, are made available to activities. One Party uses its fund mainly as a revolving fund. It finances the technical assistance and capacity building activities aspects in the form of grants, and the remaining elements, through loans to the host country entities at a preferential rate. The dues by the host are reinserted in the fund when paid.

35. Some activities involved funding by the GEF. The reasoning for acceptance by host and investor Party are that the AIJ component of the project is an add-on to a project which was to be implemented anyhow. The aim of the additional finance is to enhance the impact of a specific project. For example, the additional funds are used to install more gas boilers (in replacement of existing coal-fired boilers) than envisaged by the GEF project alone. Another example is the use of those funds to enable the host Party to subsidize the purchase of a larger number of high-efficiency light-bulbs than envisaged in the GEF project, thereby enhancing the chances of success of a demand-side management project.

**G. Contribution to capacity building, transfer of environmentally sound technologies and know-how (...) (G)**

36. Generally all reports mentioned that the activity, in one form or the other, contributed to capacity building, transfer of environmentally sound technologies and know-how. The list, hereafter, provides examples of such contributions:

(a) The sale of a non-traditional good, in this specific case, certified tons of carbon reduced or sequestered, by the host country, is combined with raising awareness and understanding, at the community and individual level, of how to integrate so-called externalities in the economic reasoning, and thereby create a supply market for a non-traditional good;

(b) Favourable loan conditions for the host country provide for favourable conditions for the transfer of energy technologies. In combination with, among other measures, training and stimulation of network building between participants in different activity sites, these kinds of activities aim at stimulating and enhancing the replication conditions for the respective technology;

(c) Mainly locally available technology is applied in the activity, thereby strengthening the in-country transfer of know-how to that technology. The same activity includes training by local experts of national energy officers at the community level;

(d) Transfer of a new technology, including training, to local producers enabling them to produce and maintain the new product;

(e) Transfer mobile emission and fuel consumption monitoring hardware and know-how to a national energy provider with the aim to optimize the national power production; and

(f) Enhance national and local capacities in the area of sustainable forest management, carbonization and cooking stoves technologies as well as PV systems.

**H. Additional comments, if any, including any practical experience gained or technical difficulties, effects, impacts or other obstacles encountered (H)**

37. Most of the additional comments are activity-specific, ranging from technical difficulties, such as the choice of electrical voltage, or co-ordination of suppliers and water supply quality, to the threat to activity implementation for lack of additional funding. In addition, training and capacity-building to maintain, service and manage technologies were considered important.

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