

23 March 1999

ENGLISH/SPANISH ONLY

UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

SUBSIDIARY BODY FOR SCIENTIFIC AND TECHNOLOGICAL ADVICE

Tenth session

Bonn, 31 May - 11 June 1999

Item 11 of the provisional agenda

SUBSIDIARY BODY FOR IMPLEMENTATION

Tenth session

Bonn, 31 May - 11 June 1999

Item 8 of the provisional agenda

ACTIVITIES IMPLEMENTED JOINTLY UNDER THE PILOT PHASE

Views on the review process of activities implemented jointly under the pilot phase and information on experience gained and lessons learned, including on the uniform reporting format

Compilation of submissions from Parties

Note by the secretariat

1. By its decision 6/CP.4, the Conference of the Parties (COP) at its fourth session invited Parties to submit to the secretariat their views on the process and information on experience gained and lessons learned with activities implemented jointly under the pilot phase as well as to provide inputs on their experience in using the uniform reporting format, in order to facilitate the review process (FCCC/CP/1998/16/Add.1).

2. Eleven such submissions* have been received. In accordance with the procedure for miscellaneous documents, these submissions are attached and reproduced in the language in which they were received and without formal editing.

* In order to make these submissions available on electronic systems, including the World Wide Web, these contributions have been electronically scanned and/or retyped. The secretariat has made every effort to ensure the correct reproduction of the texts as submitted.

FCCC/SB/1999/MISC.1

GE.99- 61063

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**EXPERIENCE GAINED AND LESSONS LEARNED WITH ACTIVITIES
IMPLEMENTED JOINTLY UNDER THE PILOT PHASE
(Decision 6/CP.4)
Submission by Australia**

Background on Australian Experience with AIJ

Australia announced its Activities Implemented Jointly (AIJ) initiative at the second Conference of Parties to the Framework Convention on Climate Change in Geneva on 17 July 1996. The Australian AIJ initiative is referred to as International Greenhouse Partnerships. The initiative was launched in October 1996 with the establishment of the AIJ Australia Office, later renamed the International Greenhouse Partnerships Office.

Australia currently has 3 AIJ projects in place with 3 separate countries. A grid connected photovoltaic project in Fiji, an air conditioner efficiency program for the Solomon Islands and a renewable energy training/demonstration project in Indonesia.

The AIJ Pilot Phase has enabled Australia to build strategic international alliances, and gain valuable experience in greenhouse gas reduction opportunities overseas.

Australia has gained experience in the following areas:

- . determination of baselines;
- . determination of GHG reductions attributable to specific projects;
- . experience related to monitoring and reporting;
- . host country approval of AIJ projects; and
- . barriers to industry participation in AIJ projects.

Determination of Baselines

Methodologies for determining "additionality" has been a major issue in the context of establishing credible baselines for AIJ projects. Emission reductions need to be seen as real, measurable and delivering long-term benefits relating to the mitigation of climate change. Being able to determine accurate and robust baselines is one of the key issues for addressing AIJ type projects.

Determining the baseline in the absence of set methodologies has proven difficult at times. Experience with industry proponents in AIJ projects and potential projects has shown that baseline-setting approaches should not be too cumbersome, complex or costly.

Key issues that need to be examined from the experience in AIJ are the appropriate methodologies for determining baselines. Issues such as whether baselines should be set on a project specific basis, project category basis or sectoral basis, and whether they should be static or dynamic should be examined in light of AIJ experience.

Australia has applied project specific baselines in determining baselines for current AIJ pilot projects. Australia has found this to be currently the only means of accurately and cost effectively determining baselines for AIJ projects.

Given the difficulties involved in determining baselines, Australia is currently undertaking to provide training and development for developing countries in greenhouse gas reduction opportunities, baseline definitions, emission monitoring and verification, and greenhouse gas reduction estimation. To the extent possible, the training will be developed in accordance with modalities already agreed by the UNFCCC.

The training will aim at building capacity in relevant agencies in developing countries to facilitate a strong awareness of modalities governing the development of baselines and monitoring and reporting procedures for projects. This will result in strong working relationships with developing countries in the AIJ pilot phase and future mechanisms. Australia has already commissioned two workbooks on renewable energy and fugitive emissions from primary energy production to act as core material for the training course. It is expected that the first training course will take place in mid 1999. The workbooks and the training course are not meant to be prescriptive but to assist with guiding and informing future work in the area.

Determination of GHG reductions attributable to Specific Projects and Experience in Reporting and Monitoring Emissions

At present there are significant complexities and uncertainties facing participants in AIJ projects relating to determining the GHG reductions attributable to a specific project.

Australia believes that detailed methodologies need to be developed to guide participants in determining the reductions attributable to specific projects. With regard to the two Australian projects in the South Pacific, determination of the reductions attributable to the project was relatively simple due to the small scale of the projects and the diesel dominated electricity generation baseline.

However, experience in trying to estimate the reductions from other potential AIJ type projects has highlighted a number of challenges relating to accurate emission reduction determination.

Australian experience in reporting on AIJ indicates that there are significant transactions costs involved in obtaining AIJ host country endorsement of the initial project and in then monitoring and reporting the project. Whereas these costs have been borne by the IGP Office to date in the case of Australia, they are nevertheless significant and, unless reduced in the future, are likely to deter the optimum level of industry participation in the long term.

Specific details of Australian experience relating to reporting on AIJ using the

UNFCCC Uniform Reporting Format (URF) can be found in a separate submission.

Project Approval by Host Country Participants

In Australia's experience, there is a lack of institutional capacity in many potential host countries for AIJ pilot projects. Australia has undertaken modest work in attempting to increase understanding and institutional knowledge in certain countries by hosting workshops (Indonesia in July 1997, Mauritius in July 1998 and one to be held in Fiji in February 1999) and undertaking missions to potential host countries.

However there remains a need to build institutional capacities in host and investor countries alike with a view to facilitating AIJ project decisions, especially regarding project specifics and methodologies. The lack of drivers for AIJ projects mentioned below is one reason for the lack of resources dedicated to AIJ by potential host countries.

The training and development course to be hosted by Australia (mentioned previously) is another means by which Australia is attempting to increase capacity in host countries for AIJ.

Lack of Drivers for Industry Involvement

One of the lessons learnt from the AIJ Initiative by Australia has been that, in the absence of credits for greenhouse gas emission reductions, the incentives and drivers for industry participation in collaborative projects to mitigate climate change is limited.

The lack of industry engagement in AIJ projects has been a significant concern. Industry has noted a lack of drivers behind AIJ (ie credits) and a lack of certainty in the pilot phase as major deterrents to more active participation.

Benefits in terms of experience in collaborative projects, baseline determination, building and strengthening institutional capacity and linkages as well as associated public relations benefits from AIJ activities have been communicated to industry, but by themselves, have not resulted in a high degree of industry interest in the AIJ pilot phase. The provision of some funding from the International Greenhouse Partnerships Office has seen a significant increase in interest in collaborative projects.

Industry has also identified other concerns relating to participation in the AIJ pilot phase. These relate to the issue of whether any voluntary action taken in the learning phase of AIJ may be eligible for credits when the Kyoto mechanisms are put in place.

Industry wishes to be assured that any action taken now regarding climate change reduction does not disadvantage them in light of the developments outlined in the Kyoto Protocol.

Industry would feel more secure in investing in AIJ type activities if there was some decision on the likelihood of AIJ projects being transferable to CDM or JI if they meet the requirements of these mechanisms as decided by the UNFCCC.

Conclusions

AIJ has demonstrated that, for the Kyoto project-based flexibility mechanisms to work effectively, the private sector will need to be engaged through appropriate incentives; that there is a need to build institutional capacities in host and investing countries alike; and that detailed methodologies need to be developed for determining GHG emission baselines, reduction estimates, and for monitoring, verification and reporting. The issue of conversion of existing (or about to commence) projects in the AIJ pilot phase to the Kyoto mechanisms will also need to be addressed.

**EXPERIENCE IN USING THE UNIFORM REPORTING FORMAT (Decision
6/CP.4)**

Submission by Australia

Australia has submitted two projects to the UNFCCC using the Uniform Reporting Format (URF): Activities Implemented Jointly under the Pilot Phase. This modest experience and an examination of projects submitted by other countries has suggested the need for clarification and refining of some of features of the URF.

A) Description of project

We believe the information sought for this section of the URF is appropriate.

B) Governmental acceptance, approval or endorsement

We have no comment on this section of the URF.

C) Compatibility with and supportiveness of national economic and development and socioeconomic and environment priorities and strategies

See comment under Section D.

D) Benefits derived from the activities implemented jointly project

Sections C and D under the current URF cover largely the same territory. Compatibility and supportiveness of national economic and development priorities as well as environmental priorities and strategies can be covered adequately in the description of environmental, social/cultural, and economic benefits under section D. Australia therefore proposes that section C be merged with section D and that all issues be addressed under "Benefits derived from the activities implemented jointly project".

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

It is important that the information provided under this section is rigorous, transparent and detailed. Under the current reporting requirements there is no guidance provided under "E.1 Estimated emissions without the activity (project baseline)". The UNFCCC should address the issue of baseline setting as a priority.

Australia is looking to progress this issue through developing workbooks and a training and development course for non-Annex B countries in the areas of greenhouse gas reduction opportunities, baseline definitions, emission monitoring and verification, and greenhouse gas reduction estimation. To the extent possible the training will be developed in accordance with modalities

already agreed by the UNFCCC.

- F) Bearing in mind that the financing of activities implemented jointly shall be additional to 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 flows, please indicate**

The URF should make provision for the potential commercial in confidence nature of some information regarding funding. Companies and industry involved in AIJ projects are at times hesitant in providing detailed information concerning funding sources for AIJ projects. Indicative level of funding and funding sources for areas other than existing ODA should be accepted in this category; any ODA or GEF funding should be specifically identified.

- G) Contribution to capacity building, transfer of environmentally sound technologies and know-how to other Parties, particularly developing country Parties, to enable them to implement the provisions of the Convention. In this process, the developed country Parties shall support the development and enhancement of endogenous capacities and technologies of developing country Parties**

We have no comment on this section of the URF however recognise that this is a very significant issue and that it will be taken up under the SBI context.

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

We have no comment on this section of the URF.

Inputs from China on Experience and Lessons of AIJ under the Pilot Phase

9 February 1999

The following are initial inputs from China, as requested by Decision 6/CP.4, on the country's experience in using the uniform reporting format for AIJ projects, and on its experience gained and lessons learned with AIJ under the pilot phase. The numbering of each of the following points refers to the numbering of Annex III to FCCC/SBSTA/1997/4. China will continue to make efforts to the progress of AIJ under the pilot phase.

I. The experience in using the uniform reporting format for AIJ project activities

A) Description of project

1. The item on "Activity starting date" and "Activity ending date" in Paragraph 3) "Activities", is not clearly defined and needs to be further elaborated.
2. In Paragraph 4) "Cost", the item titled "Cost of project" needs to be defined explicitly, listing out its cost elements.
3. In Paragraph 4) "Cost", the item titled "AIJ component" should also be defined clearly, so as to distinguish this from non-AIJ component.
4. The title of Paragraph 5), i.e. "Mutually agreed assessment procedures" seems too noncommittal and needs to be elaborated clearly.

B) 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

5. In Paragraph 1) "Estimated emissions without the activity (baseline)". Due to lack of the methodological guideline to the calculation of baseline, the baseline results provided respectively by Parties participating AIJ projects often lack comparability.
6. In the Paragraph 2) "Estimated emissions with the activity". Similarly, methodological guideline to the determination of the scope of AIJ project activities is lacking, and needs to be elaborated.

G) Contribution to capacity building, transfer of environmentally sound technologies and know-how to other Parties, particularly developing country

Parties, to enable them to implement the provisions of the Convention. In this process, the developed country Parties shall support the development and enhancement of endogenous capacities and technologies of developing country Parties

7. It is necessary to list out the items of concrete elements of the capacity building, and to elaborate concrete ways and means of transferring environmentally sound technologies and know-how to participating developing country Parties.

II. Information on experience gained and lessons learned with AIJ pilot phase

The major experience gained and lessons learned with AIJ pilot phase are initially summarized as follows:

1. Nature of AIJ financing:

It is critical to define the nature of financing of AIJ projects based on the following criteria:

- a) The financing of AIJ shall be additional to the financial obligations of Annex II Parties under the Convention as well as additional to current ODA flows.
- b) Funding for the AIJ project provided by the participating developed country Party to the participating developing country Party, should be on grant basis.

Therefore, any current projects funded by ODA or GEF shall not be labeled or re-packaged as AIJ projects. Nor shall any existing or ongoing projects on GHG emission by GHG sources or removals by sinks through bilateral or multilateral commercial cooperation, be labeled or re-packaged as AIJ projects.

2. Indigenous capacity limitation in identifying and managing appropriate AIJ projects:

The current AIJ projects under the pilot phase should assist enhancing the capacity building for the participating developing country Parties in dealing with AIJ project identification and design, project feasibility evaluation, project implementation and monitoring, etc.

3. Technology transfer:

The technology transfer for AIJ projects should be additional to Annex II Parties' obligation of technology transfer under the Convention.

4. Uncertainty in methodological issues:

AIJ methodological issues are fraught with uncertainties and non-comparability. Therefore, it is necessary to enhance the further study on methodological issues with a view to objectively elaborating methodological guidelines.

REPORTE NACIONAL SOBRE ACTIVIDADES CONJUNTAS
DURANTE LA FASE PILOTO
REPÚBLICA DE COSTA RICA ¹

(Febrero 1999)

ANTECEDENTES JURÍDICOS

Conscientes de la importancia de la protección integral del medio ambiente, Costa Rica ratificó en 1994, el "Convenio sobre la Diversidad Biológica", por medio de las Leyes No. 7416 y en 1994, la "Convención Marco de las Naciones Unidas sobre el Cambio Climático" (CMNUCC), Ley No. 7414. De esta forma, el país integraba en un todo armónico de leyes especiales, los problemas atmosféricos y los problemas de protección de la biodiversidad.

El punto culminante de estos esfuerzos, lo representa la aprobación de la "Ley Orgánica del Ambiente", Ley No. 7554, la cual se puede definir como una ley que recoge y sintetiza los modernos principios de la legislación internacional en un todo orgánico que vincula la actuación de los órganos estatales y particulares.

Posteriormente, se crearon una serie de órganos estatales como el Consejo Nacional Ambiental, la Secretaría Técnica Ambiental, la Contraloría Ambiental y el Tribunal Ambiental Administrativo, que son los instrumentos de ejecución y aplicación de este conglomerado orgánico de normas.

En 1996, se aprobó una nueva Ley Forestal (Ley No. 7575) la cual incorpora modernos conceptos, tales y como:

- El pago de los servicios ambientales locales y globales para los bosques y plantaciones forestales.
- El papel del Estado con respecto a la responsabilidad de proteger y controlar los bosques y su rol como promotor y facilitador de la actividad privada.

Mediante Decreto Ejecutivo, se procedió a emitir el Reglamento a la Ley Forestal, en el cual se reglamentó el mecanismo de Pago de Servicios Ambientales, regulando la forma de efectuar el reclamo de créditos de carbono por compensación internacional del servicio ambiental de mitigación de emisiones de gases con efecto invernadero.

¹ Remitido por el Gobierno de Costa Rica a la Secretaría de la Convención Marco de las Naciones Unidas sobre el Cambio Climático el 12 febrero de 1999.

Asimismo, como parte de los esfuerzos regionales para la reducción de emisiones de gases con efecto invernadero, Costa Rica ratificó como Ley No. 7513, el Convenio Regional sobre Cambios Climáticos, suscrito por los países Centroamericanos en ciudad de Guatemala en 1993.

Todo este conglomerado de instrumentos jurídicos, ha permitido crear un adecuado marco institucional para apoyar y fortalecer medidas nacionales que regulen nuestras emisiones a la atmósfera y nos enlacen con los esfuerzos internacionales en favor de proteger el planeta de los efectos adversos del cambio climático.

MARCO INSTITUCIONAL

En concordancia con los compromisos asumidos en la CMNUCC, Costa Rica ha avanzado en pro de la consolidación de un marco institucional para lograr el desarrollo de proyectos en el marco de las Actividades Conjuntas (AC).

En 1995, se firmó un convenio de cooperación entre los Sectores Gubernamental, No Gubernamental y Privado, con el fin de crear la Oficina Costarricense de Implementación Conjunta (OCIC). Este convenio fue suscrito por el Ministerio del Ambiente y Energía (MINAE), como ente rector del sector ambiental, la Coalición de Iniciativas de Desarrollo (CINDE), representando al sector privado especializado en la atracción de inversiones, la Fundación para el Desarrollo de la Cordillera Volcánica Central (FUNDECOR), ONG de reconocida trayectoria en el campo forestal y la Asociación Costarricense de Productores de Energía (ACOPE), que representa a los generadores privados de electricidad con fuentes renovables.

La OCIC es la autoridad nacional que facilita la atracción de inversiones, proporciona los lineamientos generales, evalúa anteproyectos de AC, vela por el monitoreo de los proyectos, reporta a la Secretaría de la CMNUCC y representa al Gobierno de Costa Rica en las negociaciones ante la Convención y otros órganos multilaterales y de relación bilateral.

Con el fin de consolidar legalmente esta iniciativa, en 1996 se eleva la OCIC al rango de "órgano de desconcentración máxima técnico administrativo" del MINAE. Al otorgársele este carácter, se garantiza que sus políticas son vinculantes con los órganos gubernamentales y privados a nivel nacional; y al elevarla al rango de órgano de desconcentración máxima, se le permite actuar con la suficiente autonomía técnica y administrativa.

ACUERDOS BILATERALES

En 1994, se firmó entre el gobierno de Costa Rica y el de Estados Unidos de

América, la "Carta de Intenciones para el Desarrollo Sostenible, la Cooperación y la Implementación Conjunta de medidas para evitar y reducir las emisiones de gases que provocan el efecto invernadero", tendiente al desarrollo de un programa que contribuya con apoyo financiero por medio de entidades del sector privado norteamericano, para mitigar las emisiones de gases con efecto invernadero. Asimismo, en 1995, ambos gobiernos firmaron un anexo complementario al acuerdo anterior, con el propósito de ampliar las esferas de cooperación entre ambos países para el desarrollo de proyectos en el marco de las AC.

El primer acuerdo para ejecutar un proyecto de Actividades Conjuntas, se llevó a acabo con el Gobierno de Noruega en octubre de 1996, mediante el cual se combina la parte de sector energía y bosque. Este acuerdo representa la primera transacción mundial de mitigación de gases con efecto invernadero provenientes del sector forestal, por la suma de US\$ 2.0 millones. El Gobierno y Sector Privado de Noruega recibieron por parte del Gobierno de Costa Rica, Certificados de Mitigación por el equivalente a 200.000 toneladas métricas de carbono

En febrero de 1998, el Gobierno de Costa Rica y el Gobierno de Suiza, firmaron un Memorando de Entendimiento donde las partes se comprometen a apoyar y desarrollar proyectos que reduzcan la emisiones de gases con efecto invernadero, apoyando el Protocolo de Kioto y sus mecanismos de flexibilidad.

En marzo de 1998, el Gobierno de Costa Rica y el Gobierno de Finlandia, firmaron un Memorando de Entendimiento, en el cual las partes se comprometen a promover los mecanismos de la Convención y del Protocolo de Kioto. Así mismo, las partes acuerdan integrar las experiencias generadas en la región Centroamericana en AC, para desarrollar esfuerzos en la reglamentación del Mecanismo de Desarrollo Limpio del Protocolo (MDL). Asimismo se comprometen a estudiar posibilidades de inversión en los Certificados de Mitigación de Emisiones de Gases con Efecto Invernadero.

En junio de 1998, el Ministerio del Ambiente y Energía de Costa Rica y el Instituto Mexicano de Cooperación Internacional, firman un Memorando de Entendimiento con el propósito de identificar proyectos bilaterales que produzcan reducciones certificadas de emisiones para ser comercializadas a Partes anexo I de la CMNUCC a través de los mecanismos financieros de la Convención y del Protocolo y apoyar la participación de los sectores públicos y privados de cada país en el desarrollo de proyectos en el marco de las AC.

Estos acuerdos son cartas de intenciones tendientes a desarrollar estrategias que permitan ejecutar proyectos en el marco de las AC y la creación de experiencias para aprovechar las oportunidades que se proporcionan a los países en desarrollo por medio del Mecanismo de Desarrollo Limpio, aprobado

en el protocolo de Kioto.

MARCO FINANCIERO

En la Ley Forestal de Costa Rica, en su artículo 3 inciso (k), se autoriza al Estado a interiorizar los costos del servicio ambiental de mitigación de gases para incentivar los esfuerzos de que realizan los propietarios nacionales de bosque naturales y plantaciones forestales, y se faculta al Estado al reclamo de este servicio ambiental a nivel internacional, garantizando a los inversionistas extranjeros que el Estado tiene las facultades, dentro del marco legal, para promocionar y comercializar los beneficios de mitigación de aquellos proyectos que se enmarcan en este concepto.

Bajo el marco jurídico señalado, Costa Rica establece un mecanismo ágil y transparente para el manejo de los recursos que aporten los socios extranjeros en proyectos de AC. En este sentido, en 1996 se emite un Decreto Ejecutivo estableciendo el denominado "Fondo Nacional Específico para la Conservación y el Desarrollo de Sumideros y Depósitos de Gases con Efecto Invernadero".

La idea de este Fondo es que los aportes que efectúen los inversionistas extranjeros ingresen a un fondo específico destinado exclusivamente a la ejecución de los términos acordados en los proyectos nacionales de AC. Asimismo, se diseñó un instrumento financiero para la comercialización internacional de reducciones de emisiones certificadas de gases de efecto invernadero, denominado Certificado de Mitigación de Gases con Efecto Invernadero, conocido internacionalmente como CTO.

Los CTOs se definen como una cantidad determinada de reducciones certificadas de emisiones de gases de efecto invernadero, expresadas en unidades equivalentes de carbono, que han sido reducidas o compensadas por medio de Proyectos de AC que se implementan en Costa Rica y que han sido reportados a la Secretaría de la CMNUCC.

El monitoreo interno de las actividades y la verificación externa e independiente de los beneficios ambientales derivados de la ejecución del proyecto permiten asegurar que la mitigación es real, de calidad demostrable, y que cumple con los requisitos establecidos por la Secretaría de la CMNUCC.

Costa Rica se compromete con el inversionista que adquiere los CTOs a velar por la ejecución, de las acciones de verificación por un auditor externo e independiente a las partes involucradas.

MARCO SOCIAL

Costa Rica ha reconocido la necesidad de dar un aporte nacional a la mitigación de las emisiones de gases con efecto invernadero por medio del desarrollo de dos acciones: La primera, a través de la interiorización de los costos de los servicios ambientales y en específico del servicio ambiental de mitigación de gases con efecto invernadero. La segunda, a través de fomento de actividades para optimizar y usar racionalmente la energía.

En este sentido, ha desarrollado las siguientes actividades específicas:

- Con la Ley Forestal Nº 7575 de 1996, se abre la posibilidad de que el Estado proceda al cobro de los servicios ambientales, a todas aquellas personas físicas y jurídicas de carácter nacional, que se beneficien de un servicio ambiental, dentro de los cuales se encuentra la mitigación de emisiones de gases con efecto invernadero.
- Un porcentaje del Impuesto Selectivo de Consumo a los hidrocarburos se destina al financiamiento de un Programa de Compensación a los pequeños y medianos propietarios de bosques y plantaciones forestales por el servicio ambiental de mitigación de emisiones de gases con efecto invernadero. El pago a los propietarios de bosques y plantaciones sirve a su vez como estímulo al desarrollo de actividades de conservación, manejo y reforestación y brinda sostenibilidad financiera al sector forestal privado. Este esfuerzo permitirá destinar la suma de \$13.5 millones de dólares anuales, al programa de compensación como un aporte nacional en forma independiente de las actividades de implementación conjunta.
- Promulgación del Reglamento para el control de emisiones de gases y partículas producidas por vehículos automotores: A efecto de regular y controlar las emisiones de los vehículos a la atmósfera, mediante Decreto Ejecutivo, se promulgó un Reglamento que establece límites máximos para la emisión de óxidos de nitrógeno, hidrocarburos no metanos, monóxido de carbono y humo a los transportes automotores, obligando a su vez a los propietarios de a someter a revisión técnica sus vehículos.
- Promulgación de una normativa nacional para la utilización racional y uso alternativo de fuentes de energía: Como punto de partida, se promulgó en 1990, la Ley No. 7200 que autoriza la generación eléctrica autónoma o paralela , reformada en 1995, mediante la Ley No. 7508, en la cual se permite a las entidades privadas participar en la generación eléctrica, incluyendo la utilización de usos alternativos de energía como el procesamiento de desechos sólidos y orgánicos, generación hidráulica, geotérmica y eólica. Posteriormente, se promulga el Decreto Ejecutivo que establece la Comisión Nacional de Conservación de la Energía, entidad

adscrita al MINAE, con el objetivo de elaborar y ejecutar un Programa Nacional de Conservación de la Energía.

- En 1994, se promulgó la Ley de Uso Racional de la Energía, No. 7447, mediante la cual se establece la obligatoriedad de ejecutar programas de uso racional de la energía en las empresas de alto consumo, así como se incentiva la venta y suministro de equipos y tecnologías a los usuarios que permitan el ahorro energético.
- En 1998, se promulgó la Ley. No. 7779 sobre Uso, Manejo y Conservación de Suelos, la cual garantiza un adecuado ordenamiento territorial de la Nación y establece medidas eficientes para la recuperación de suelos degradados y darle el uso más adecuado, al tiempo que reordena institucionalmente los órganos públicos encargados de planificar el uso del suelo y su recuperación. Esta Ley garantiza que los suelos de vocación forestal puedan recuperarse y destinarse como tal, así como también previene su degradación mediante obligaciones dirigidas al propietario para que haga un adecuado manejo del recurso. Paralelo a ello, se promulgó la Ley de Biodiversidad, la cual pretende la regulación del uso y manejo, el conocimiento asociado y la distribución justa de los beneficios y costos derivados del aprovechamiento de los elementos de la biodiversidad. Esta Ley establece a su vez el Sistema Nacional de Areas de Conservación (SINAC), como un órgano para el manejo de Areas Silvestres Protegidas.

De esta forma, nuestro país da cumplimiento a las obligaciones que ha adquirido ante la comunidad internacional y contribuye con sus esfuerzos a mitigar lo efectos adversos del cambio climático.

SECTOR FORESTAL

La Conferencia sobre Medio Ambiente y Desarrollo de las Naciones Unidas celebrada en Río de Janeiro en el año 1992, tuvo como consecuencia la adopción de numerosas medidas relacionadas a la protección y el aprovechamiento de los recursos forestales mundiales en su calidad de contribución de un desarrollo sostenible y la mitigación del cambio climático.

El debate en torno al tema se centra cada vez más en la necesidad de encontrar nuevas fuentes de financiamiento o de aprovechar mejor las ya existentes y es en este sentido donde Costa Rica, a través de las medidas adoptadas para la reducción del efecto invernadero en el marco de la fase piloto de las Actividades Conjuntas(AC) de la Convención Marco de Naciones Unidas sobre el Cambio Climático (CMNUCC) está desarrollando experiencia en el sector forestal, para la atracción de nuevas inversiones que permitan hacer más atractiva la actividad forestal en el sector privado.

El Panel Intergubernamental de Cambio Climático (IPCC) en una escala global, reconoce que las prácticas de cambio y gestión del uso de la tierra, juegan un papel importante en el balance neto entre emisiones y absorciones de dióxido de carbono (CO₂). Al respecto, considera como seis las principales actividades relacionados con el uso del suelo de mayor importancia:

1. Tala de bosques
2. Conversión de bosques en áreas desarboladas
3. Conversión de pastizales
4. Conversión de pastizales en terrenos cultivados o de pastoreo
5. Regeneración natural
6. Bosques gestionados (naturales o plantaciones forestales)

En el sector forestal, Costa Rica ha desarrollado su experiencia en materia de AC en tres etapas:

- Primera Generación - En 1994, Costa Rica realiza su inserción dentro de las AC con la generación de pequeños proyectos individuales. Esta es una etapa caracterizada por la iniciativa privada y pocos lineamientos gubernamentales en el campo
- Segunda Generación - Con el objeto de potenciar una mayor participación de pequeños y medianos propietarios forestales y posibilitar maximizar el potencial forestal del país dentro de las iniciativas de AC, en 1996 el país decide formular dos proyectos forestales de cobertura nacional: uno en el sector forestal gubernamental y otro en el sector privado, como una forma de responder a políticas nacionales de desarrollo.
- Tercera Generación: Con el afán de reducir los costos de transacción por tonelada de CO₂ equivalente fijada o no emitida, asociados con el desarrollo, evaluación y mercadeo de los proyectos, en 1997 se desarrolla un instrumento financiero para ser utilizado en las transacciones de compensaciones de gases de efecto invernadero, denominado el Certificado de Mitigación de Gases con Efecto Invernadero, conocido internacionalmente como CTO. Un CTO representa un número específico de unidades de emisiones de gases de efecto invernadero expresadas en unidades de carbono equivalente reducidas o fijadas. Cada CTO es verificado y certificado por una organización internacional independiente. En el año de 1997 a través del Proyecto AC Costa Rica/Noruega: Reforestación y Conservación de Bosques, se dio la primera transacción mundial de compensaciones expresadas en CTOs, entre el sector privado y gubernamental de Noruega y el Gobierno de Costa Rica.

SUMARIO DE PROYECTOS

Desde 1995, Costa Rica ha logrado desarrollar cuatro proyectos forestales en el marco de la Fase Piloto de AC, los cuales han sido reportados a la Secretaría de la Convención. El monto total de las inversiones relacionadas con estos proyectos forestales se estima en US\$ 158.4 millones.

◆ Proyecto AC Costa Rica/EUA: ECOLAND: Parque Nacional Piedras Blancas

Proyecto de conservación de bosque natural ejecutado en su totalidad y una vigencia o vida útil de 15 años que tiene como objetivo la preservación de 2,340 hectáreas (ha) de bosque primario en el Parque Nacional Piedras Blancas, mediante la compra de dichas tierras a propietarios privados a un costo de US\$ 1 millón.

Se estiman en 366.200 toneladas métricas de carbono los beneficios ambientales del proyecto en términos de la mitigación de gases con efecto invernadero, producto de la pérdidas evitadas por deforestación no generada y estímulo a la regeneración natural.

En dicho proyecto participan :

- Tenaska Inc: Productor independiente de energía líder en la investigación e implementación de proyectos para la mitigación del cambio climático.
- Trexler y Asociados, Inc: Organización privada dedicada a la asistencia de empresas en la identificación e implementación de estrategias para la reducción y compensación de gases de efecto invernadero.
- Fundación Nacional de Pesca y Vida Silvestre de Estados Unidos: Organización No Gubernamental dedicada a la conservación de los recursos naturales, pesca, vida silvestre y plantas.
- Combos: Organización No Gubernamental de Costa Rica que promueve la conservación y el manejo del bosque tropical a través de la acción privada.
- MINAE: Ministerio del Ambiente y Energía de Costa Rica
- Area de Conservación Osa: Unidad Administrativa del MINAE encargada del manejo y administración del Parque Nacional Esquinas

◆ Proyecto AC Costa Rica/EUA: Proyecto Forestal de Klinki

Proyecto de reforestación aprobado en 1995 y actualmente en ejecución que a un costo de US\$ 3.8 millones, pretende involucrar a cientos de propietarios en la zona de Turrialba en la conversión de áreas de pasto a plantaciones forestales, por medio de la promoción de 6.000 ha utilizando para ello el Pino Klinki

(*Araucaria hunsteini*), que es una especie forestal de alto contenido en biomasa, originaria de Papua Nueva Guinea. El financiamiento se pretende obtener mediante las transacciones financieras de organizaciones e individuos en Estados Unidos por la compensación realizada en Costa Rica de sus emisiones.

Se estiman en 1.966.495 toneladas métricas de carbono los beneficios ambientales del proyecto en términos de la mitigación de gases con efecto invernadero, producto de la fijación generada.

Participan en dicho proyecto:

- Reforest The Tropics, Inc: Organización privada sin fines de lucro asentada en Estados Unidos que pretende ofrecer a individuos, organizaciones y compañías en Estados Unidos, una oportunidad de mitigar el cambio climático mediante actividades Compañía privada especializada en cultivos forestales de largo plazo, asistencia y mercadeo
 - Centro Agrícola Cantonal de Turrialba
 - Otros colaboradores: Escuela Forestal de la Universidad de Yale, el Laboratorio de Productos Forestales de Estados Unidos y el Centro Agronómico Tropical de Investigación y Enseñanza (CATIE)
- ◆ **Proyecto de AC Costa Rica/Noruega: Reforestación y Protección de Bosques (PFP)**

El PFP es un compromiso entre el Gobierno y el sector forestal privado para impulsar anualmente, bajo el Programa de Pago de Servicios Ambientales, la siembra de 15.000 ha en plantaciones, el aprovechamiento sostenible de 7.000 ha y proteger al menos 50.000 ha .

Se inicia con la comercialización de 200.000 toneladas de carbono con el Gobierno y un consorcio de empresas privadas de Noruega, provenientes del componente forestal de un proyecto hidroeléctrico de la Compañía Nacional de Fuerza y Luz (CNFL), que pretende a través de la conservación, manejo sostenible y reforestación de 4.000 ha en la Cuenca del Río Virilla, garantizar el abastecimiento y regularidad de los flujos de agua requeridos para la operación de la planta hidroeléctrica.

Las partes noruegas compraron CTOs por un equivalente a US\$ 2.0 millones, provenientes del programa de Pago de Servicios Ambientales ejecutado por el Fondo Nacional de Financiamiento Forestal (FONAFIFO). (US\$ 1.7 millones provenientes del Fondo del Carbono del Gobierno Noruego y US\$ 300,000 provenientes de fondos privados del Consorcio Noruego).

Con la promulgación de la Ley Forestal # 7575 (1996) y su Reglamento, se provee al sector forestal privado de un nuevo marco legal donde se establecen iniciativas que han permitido estimular la actividad forestal, sea esta de conservación, manejo o reforestación.

Adicional a los ingresos provenientes de la colocación internacional de los CTOs, el programa de Pago de Servicios Ambientales prevé un financiamiento proveniente de recursos internos. Dichos recursos provienen de un impuesto fiscalmente neutro que pagan todos los consumidores de combustibles fósiles, que genera recursos para soportar transferencias a través de las cuales se da contenido a un principio causante, " el que contamina paga al que descontamina", como parte de una política nacional de interiorizar los costos de la mitigación.

El monto anual por hectárea asignado para cada modalidad de incentivo, es fijado por el Gobierno de la República con base a criterios técnicos del Ministerio del Ambiente y Energía (MINA E) a través de FONAFIFO.

| Actividad | US\$/ha ² | % /año | | | | |
|---------------------------|----------------------|--------|----|----|----|----|
| | | 1 | 2 | 3 | 4 | 5 |
| Reforestación | 560 | 50 | 20 | 15 | 10 | 5 |
| Manejo de Bosques | 342 | 50 | 20 | 10 | 10 | 10 |
| Conservación/Regeneración | 220 | 20 | 20 | 20 | 20 | 20 |

Ha sido notorio el impacto de la política de PSA a los pequeños y medianos propietarios de bosques naturales y plantaciones y evidente la adicionalidad del PFP en cuanto a reducción de emisiones. Mientras en 1994, el total de hectáreas incentivadas con los sistemas vigentes en esas fechas era de 15,596 ha, en 1997 mediante el PSA se pasó a 97.398 ha, representando una inversión aproximada de US\$ 14.0 millones

A 1998, a través de la figura de Pago de Servicios Ambientales, se han incentivado la conservación de 138,044 ha de bosques naturales, el manejo bajo criterios de sostenibilidad de 17,885 ha y la reforestación de 13,877 ha, significando un incremento del 75% respecto a 1997 y el beneficio directo a 8,000 pequeños y medianos propietarios.

Es importante recalcar que bajo la visión costarricense, el pago de servicios ambientales no debe ser considerado como un subsidio sino como un pago por un servicio, que tiene un costo y un precio y que pretende incrementar la rentabilidad y atractivo de la actividad forestal en el sector privado, con los consecuentes beneficios ambientales.

² 1 US\$ = ₡ 275

◆ **Proyecto AC Costa Rica/EUA: Consolidación Territorial y Financiera de los Parques Nacionales y Reservas Biológicas de Costa Rica (PAP)**

Utilizando un innovativo mecanismo de mercado, el proyecto intenta la consolidación territorial y financiera de 20 parques nacionales y 7 reservas biológicas, mediante la compra de aquellas tierras dentro de dichas áreas aún no inscritas como parte del Patrimonio Forestal del Estado y la conformación con los remanentes una vez cumplida la consolidación territorial, de un fondo patrimonial. Es un proyecto forestal de gran envergadura que pretende mediante la consolidación territorial y financiera de 530,498 ha en parques nacionales y reservas biológicas, evitar emitir a la atmósfera y fijar de ella, un total 18,000,000 toneladas de carbono equivalentes con un costo aproximado de US\$ 180 millones y una vigencia de 25 años.

Los CTOs se generarán a partir de dos actividades: la deforestación evitada en 422,800 ha de bosque primario como resultado del proyecto o del secuestro generado producto de la regeneración propiciada a partir de 107.698 ha adquiridas y cubiertas de bosque secundario. Este es un proyecto en el que participan el Ministerio del Ambiente (MINAE) y la Fundación de Parques Nacionales.

Para apoyar el desarrollo de los mecanismos de comercialización de las reducciones de emisiones del PAP, el Gobierno de Costa Rica con colaboración financiera del Banco Mundial, inicio el proceso de certificación y monitoreo de los beneficios ambientales en términos de mitigación de gases de efecto invernadero de este proyecto.

Para ello se contrataron los servicios de verificación de la SGS (SGS Forestry) los cuales determinaron que las reducciones de emisiones provenientes de la primera fase de ejecución del PAP son 98% libre de riesgo para cualquier inversionista de un país industrializado: La metodología utilizada para realizar las estimaciones de los beneficios netos, en unidades equivalentes de carbono y el sistema de monitoreo del proyecto también fueron evaluados por la Société Générale de Surveillance (SGS).

La SGS Forestry certificó la primera emisión de CTOs del PAP y determinó los niveles de reserva necesarios para garantizar la comercialización internacional con los niveles de seguridad certificados.

Adicionalmente, la SGS será el ente externo encargado de verificar la ejecutoria del proyecto de acuerdo a los protocolos por ellos establecidos.

El proyecto en su primera fase de implementación posee su línea base certificada por SGS Forestry y ha sido ejecutado en un 6% (30.069.6 ha). El certificador ha determinado que producto de las acciones implementadas en la consolidación territorial de las primeras 30.069.6 ha se reducirán emisiones en el orden de 1.688.434 tmC en los próximos 20 años, equivalente a un 9.4% del potencial proyectado.

Es importante resaltar que con la implementación del PAP, en virtud de los objetivos y su envergadura nacional, se engloban dos actividades forestales anteriormente comunicados a la Secretaría de la Convención: CARFIX: Gestión Forestal Sostenible, un proyecto de protección y reforestación y el BIODIVERSIFIX, proyecto de restauración y consolidación de áreas protegidas en la provincia de Guanacaste.

PROYECTOS AC - FORESTALES

| Nombre del Proyecto | Tipo de Proyecto | Area (ha) | Duración (años) | Costo Total (US\$ millones) | Reducción de Emisiones (Tm C) |
|---------------------|------------------|----------------|-----------------|-----------------------------|-------------------------------|
| ECOLAND | Preservación | 2.340 | 15 | 1 | 366.200 |
| KLINKI | Reforestación | 6.000 | 40 | 3.8 | 1.966.495 |
| CR/Noruega | Preservación | 2.000 | 25 | 3.3 | 313.646 |
| | Reforestación | 1.000 | | | |
| | Regeneración | 1.000 | | | |
| PAP | Preservación | 422.800 | 25 | 180 | 18.000.000 |
| | Regeneración | 107.698 | | | |
| TOTAL | | 542.838 | | 188.1 | 20.646.341 |

SECTOR ENERGÍA

En la Agenda 21 acordada en Río de Janeiro (1992), también se insta a los Estados a encontrar formas más eficientes de producir, distribuir y consumir energía, y pide un mayor apoyo para los sistemas energéticos sostenibles desde el punto de vista ambiental, otorgando mayor énfasis en el uso de fuentes renovables.

A pesar de que las fuentes renovables son más intensivas en capital, la política energética nacional está enfocada a promover una oferta energética que reduzca emisiones de gases de efecto invernadero y contaminantes a la atmósfera, aprovechando el potencial que tiene el país con sus recursos naturales (principalmente hídrico y eólico).

En virtud de la tendencia a la baja en los precios internacionales de los hidrocarburos, la energía renovable ha perdido competitividad. En este sentido, la consolidación de un mercado internacional de reducciones de emisiones de gases con efecto invernadero podría constituirse en un factor vital para convertir

la energía renovable en un instrumento para el desarrollo humano sostenible.

Costa Rica con su potencial de generación hidroeléctrica podría, de acuerdo a las nuevas pautas ambientales enmarcadas en el texto de la Convención y de su Protocolo, insertarse exitosamente en el mercado regional bajo la internalización de las externalidades globales derivados de la comercialización internacional de reducciones de emisiones certificadas, atribuibles a cada proyecto de energía renovable.

Proyectos de Energía Globales

Las AC en el desarrollo de proyectos de energía puede ser una oportunidad que se le presenta a una Parte no-anexo I para satisfacer el incremento en su demanda energético con energía limpia, siempre y cuando, los países con compromisos vinculantes de reducciones, valoren económicamente y transfieran fondos de los beneficios ambientales generados por los mismos.

Actualmente, Costa Rica tiene 4 proyectos de energía renovable reportados a la Secretaría de la Convención. Un proyecto hidroeléctrico y 3 proyectos eólicos. El proyecto hidroeléctrico Doña Julia (20 MW) inició operación en Diciembre de 1998.

Entre los proyectos eólicos, Plantas Eólicas S.A. (20 MW) está en operación desde junio de 1996 y Aeroenergía (6MW) desde setiembre de 1998. Ambos proyectos son los únicos proyectos eólicos comerciales en Latinoamérica. Tierras Morenas (20 MW) inicia operación en setiembre de 1999. Esta experiencia es el testimonio de que la energía eólica es una importante opción de abastecimiento de la demanda nacional. Los proyectos hidroeléctricos y eólicos se complementan, ya que durante la estación seca el viento es fuerte y viceversa.

El uso de nuevas fuentes ha permitido que Costa Rica actualmente cuente con una matriz energética más limpia y menos vulnerable a los efectos de la variabilidad climática.

El monto total de las inversiones directas relacionadas con estos proyectos se estiman en 94 millones de dólares y corresponde aproximadamente a un 6.5% de la capacidad instalada del país (ver cuadro adjunto).

Centroamérica impulsa un ambicioso proyecto de interconexión eléctrica para satisfacer las necesidades de electricidad del área mediante la operación de un mercado regional abastecido por empresas públicas y privadas.

Conocedores de la dependencia de Centroamérica en los combustibles fósiles para la generación eléctrica, el "Proyecto de Exportación de Energía a

Centroamérica", impulsado por Asociación Costarricense de Productores Privados de Energía (ACOPE), se considera como un proyecto potencial de cobertura nacional.

Este proyecto está concebido como una alianza estratégica entre el sector privado costarricense y la empresa eléctrica nacional, el Instituto Costarricense de Electricidad (ICE). En esta alianza el sector privado aportará la energía eléctrica por medio de proyectos de generación y el ICE pondrá su infraestructura de transmisión, a través de la cual se hará la exportación de la energía.

Está diseñado para una capacidad instalada de 268 MW y un potencial de generación anual estimada en 1,400 GWh. El beneficio neto anual de mitigación de gases de efecto invernadero se calcula en 1,4 millones de toneladas de dióxido de carbono. La compensación económica por parte de inversionistas de Partes anexo I a cambio de las reducciones de emisiones de GEI que se generen, se considera como el factor vital para promover la competitividad del uso de fuentes renovables a nivel regional y de esta forma reorientar la matriz energética centroamericana.

PROYECTOS AC - ENERGÍA

| Nombre del Proyecto | Tipo de Proyecto | Capacidad Instalada (MW) | Producción Anual GWh/año | Costo Total (US\$ millones) | Reducción de Emisiones (tm C) |
|---------------------|------------------|--------------------------|--------------------------|-----------------------------|-------------------------------|
| Plantas Eólicas | Eólico | 20 | 98 | 30.4 | 506,720 |
| Tierras Morenas | Eólico | 20 | 90 | 27 | 562,020 |
| Aeroenergía | Eólico | 6.4 | 30 | 8.85 | 146,000 |
| Doña Julia | Hidroeléctrico | 16 | 85 | 27 | 562,020 |
| TOTAL | | 62.4 | 303 | 93.25 | 1,776,760 |

SECTOR AGRÍCOLA

En 1992, el gobierno de Costa Rica firmó un acuerdo con los representantes del sector cafetalero con el objetivo de reducir la descarga de materia orgánica a los ríos. La opción tecnológica accesible en el país era la tradicional laguna de oxidación, donde el metano, subproducto del proceso de biodegradación, se libera a la atmósfera.

En 1997, se acordó con el gobierno de Holanda, a través de su programa de Actividades de Implementación Conjunta, la realización de un proyecto para la reducción de emisiones de metano durante el proceso de tratamiento de las aguas residuales en cuatro beneficios de café. Con este proyecto se logró

introducir la tecnología de reactores anaeróbicos desarrollado por la empresa holandesa Biomass Technology Group (BTG). Esta tecnología captura el metano y lo quema, generando calor para el secado del café. Además, el proceso es más estable y procesa volúmenes de carga 15-20 veces superiores a la laguna de oxidación, a pesar de que son 15-20 veces más compactos.

El aporte del gobierno holandés a este Proyecto de AC es por la suma de US\$372,257.00 recibiendo a cambio 17,323 toneladas métricas de carbono equivalentes que van a ser mitigadas por el proyecto durante 10 años, lo que establece, el precio transado en US\$21,49 la tonelada métrica de carbono equivalente.

El acuerdo bilateral suscrito entre Costa Rica y los Países Bajos, establece que a cambio de dicha contribución, los holandeses reciben reconocimiento del 50% de las emisiones de gases con efecto invernadero. De conformidad con la política costarricense de los proyectos AC, los desarrolladores son los propietarios de las restantes 17,323 tm C que va a generar el proyecto durante su vida útil y pueden comercializarlas internacionalmente en el caso que un inversionista desee adquirir esas compensaciones.

Esto, por cuanto Costa Rica al ser una Parte no anexo I, no tiene obligaciones de reducir sus emisiones, según el principio de responsabilidades comunes pero diferenciadas establecida en la Convención Marco de Cambio Climático. El Gobierno de Costa Rica, emitiría CTOs por esta potencial comercialización una vez que se hayan verificado la implementación del proyecto y certificado los beneficios ambientales atribuibles al mismo.

PROYECTOS AC - SECTOR AGRÍCOLA

| Nombre del Proyecto | Tipo de Proyecto | Costo Total (US\$ millones) | Duración (años) | Reducción de Emisiones | |
|---------------------|----------------------|-----------------------------|-----------------|------------------------|-----------------------|
| | | | | (tm C) | (tm CO ₂) |
| ICAFE/BTG | Tratamiento de aguas | 0.973 | 10 | 34,645 | 127,031 |

Conclusiones

Las Actividades Conjuntas podrían ser una asociación simbiótica entre los países industrializados y los países en desarrollo. Por un lado, permitirían a las Partes anexo I de la Convención de Cambio Climático cumplir con una parte de sus compromisos de reducción de emisiones de gases con efecto invernadero de una manera costo-efectiva; y a la vez, brindarían a los países en desarrollo la oportunidad de atraer recursos para financiar su agenda de desarrollo sostenible, principalmente en los sectores forestales y de energía.

Lamentablemente, durante la fase piloto de AC, hubo poca participación de las Partes en la ejecución de proyectos en el marco de las AC. Ha sido evidente la poca acción de muchos gobiernos en países desarrollados por promover la participación de su sector privado en las Actividades Conjuntas y de tomar medidas regulatorias a nivel nacional que incentiven a su industria llevar acciones de mitigación, tanto a nivel local como a nivel internacional a través de Proyectos AC. Las evaluaciones preliminares de la Cumbre Río +5 y las presentadas durante la III Conferencia de las Partes de la Convención, arrojan como resultado que la mayor parte de los países comprometidos a reducir o limitar sus emisiones, o bien realizar acciones tendientes a su mitigación, han incumplido con su cometido.

Los reportes presentados a las Conferencias de las Partes por el Organismo Subsidiario de Asesoramiento Científico y Tecnológico demuestra la falta de equidad en la distribución geográfica de los Proyectos AC y en el tipo de sectores de la economía involucrados. También es clara la escasa transferencia de recursos que el Norte ha girado al Sur por la internalización del servicio ambiental de mitigación de gases con efecto invernadero, producto de la ejecución de tales proyectos.

Además, ha sido clara la falta de apoyo que los países en desarrollo han recibido por parte de las Partes del anexo I para generar capacidad institucional local y capacidad negociadora ante potenciales inversionistas en proyectos AC, así como la transferencia tecnológica.

Ahora bien, conforme a lo estipulado en la Convención, es a las Partes no anexo I a quienes les corresponde el derecho soberano a definir su agenda de desarrollo sostenible, razón por la cual, son éstas las que deben de priorizar cuales son los sectores de su economía que van a beneficiarse con las inversiones que se den en proyectos AC.

La experiencia costarricense en la Fase piloto AC, le ha permitido llegar a la conclusión que es necesario que las Partes ratifiquen el Protocolo de Kioto para que se lleven a cabo acciones contundentes para cumplir con compromisos adquiridos en la CMNUCC. Una vez que entre en vigor, las Partes en la Convención, de una manera común pero diferenciada, lleven a cabo acciones concretas tendientes a lograr el objetivo último de la Convención, que es la estabilización de las concentraciones de gases con efecto invernadero en la atmósfera a un nivel que impida interferencias antropógenas al sistema climático.

Tal y como se manifestó con anterioridad, las acciones voluntarias llevadas a cabo por algunas Partes incluidas en el anexo I han sido insuficientes a la fecha. Con la entrada en vigor del Protocolo, dichas partes tendrán que tomar medidas

concretas para reducir sus emisiones y participar activamente en los mecanismos de flexibilidad que autoriza este instrumento legal para cumplir con

los compromisos cuantificados de limitación y reducción de las emisiones consignadas en el Anexo B de Protocolo.

El Mecanismo de Desarrollo Limpio (MDL), aprobado en el Protocolo de Kioto contempla en gran parte las cosas positivas que Costa Rica ha experimentado durante la fase piloto de las AC. A la vez, corrige mucha de las deficiencias en los Proyectos AC que el país encontró durante el desarrollo de su marco jurídico, institucional, así como, en las negociaciones bilaterales celebradas con gobiernos, representantes de los sectores privados y no-gubernamentales de países incluidos en el anexo I de la Convención.

El propósito del MDL definido en el artículo 12.2 del Protocolo, permite a los países en desarrollo atraer recursos para cubrir los costos de producción energética con fuentes renovables y para manejar su tierra y recursos silviculturales de una manera sostenible, por medio de la internalización de las externalidades globales de los proyectos MDL.

Brinda a las Partes no incluidas en el anexo I, la oportunidad de contribuir de una manera efectiva al objetivo último de la Convención, siempre y cuando, se dé un significativo flujo de capital de las Partes incluidas en el anexo I a cambio de las reducciones certificadas de emisiones resultantes de las actividades de proyectos que voluntariamente desarrollen en sus sectores de la economía que consideren prioritarios las Partes no anexo I.

La experiencia adquirida en la Fase Piloto de las AC sirvió significativamente a las Partes de la Convención para definir los grandes lineamientos del MDL. A manera de ejemplos, se pueden citar: la aprobación voluntaria por cada parte en los Proyectos MDL, la centralización en la autoridad que la definirán próximamente las Partes de la Convención, la operación y supervisión del MDL, la definición de los estándares para las reducciones certificadas de emisiones (RCEs) que van a comercializarse entre las Partes, así como el desacoplamiento que debe darse entre la oferta y la demanda de reducciones de emisiones para maximizar los beneficios en el largo plazo para los países en desarrollo. Este último, les daría mejores condiciones en la negociación del precio de sus RCEs y en la definición de los sectores de la economía que prioritariamente participarían en Proyectos MDL.

Para finalizar, el MDL puede ser el instrumento financiero que permita al Sur, en la base de proyecto por proyecto, trazar una ruta de desarrollo humano sostenible sin repetir los errores que algunos países industrializados cometieron en el pasado para lograr su crecimiento económico; tal y como el gobierno de Costa Rica ha tratado de desarrollar en su política ambiental dentro del marco

de la Convención de Cambio Climático y en particular, con las oportunidades que han brindado las AC en los sectores forestal y de generación de energía con fuentes renovables.

**Submission by Germany on behalf of the
European Community and its Member States
on activities implemented jointly**

The aim of the pilot phase on activities implemented jointly (AIJ) as established under Decision 5/CP.1 is to gain experience in the implementation of concrete emission reduction projects. 95 projects have been approved by the UNFCCC-Secretariat since 1995. In its second review report on the AIJ-pilot phase the secretariat analysed all approved projects on the basis of the information provided by involved parties involved using the uniform reporting format.

This review report improves the knowledge on experiences gained during the AIJ-pilot phase. The European Community and its Member States is convinced that despite the clear differences between the project-based Kyoto-Mechanisms and AIJ, there are a number of areas where lessons learned during the AIJ-pilot phase could be usefully employed in the design, development and operation of the project based mechanisms under Art. 6 and 12 of the Kyoto Protocol. Taking our work and experience with AIJ into account in the development of the project based mechanisms will help to avoid an unnecessary duplication of efforts.

The EU welcomes the diversity of projects implemented. The review report states that there is a regional imbalance, especially considering that the great majority of projects is hosted in countries with economies in transition. In contrast, there are only few projects in Asia and the Pacific Region and only one project in Africa.

The report also shows that there is still a lack of transparency and consistency especially in the fields of standardised terminology and common definitions, costs, the determination of baselines, monitoring, reporting as well as verification. In addition, it shows the need to improve accuracy and comparability of data.

The EU urges all Parties involved in AIJ-projects to submit new or updated reports using the uniform reporting format in order to reduce the above mentioned lack and inaccuracy of

information and to provide a contribution to the development of a framework for the use of the project-based mechanisms in Art. 6 and 12 of the Kyoto Protocol.

The EU believes that the AIJ pilot phase should be reviewed in terms of :

- Contribution of projects to capacity building, institutional strengthening and stakeholder participation.
- Compatibility with and ability to support of sustainable development needs, priorities and strategies.
- Impacts of projects on national standards and best practices used in the Annex I Countries.
- Emission reductions and other environmental benefits achieved and associated costs, including transaction costs.
- Experiences gained with baselines, project monitoring and verification procedures.
- Recommendations for guidelines and methodologies related to project based mechanisms under Art. 6 and 12 of the Kyoto Protocol.

The EU is of the opinion that COP 5 should take a decision on the pilot phase. The EU believes that Annex I Parties should be able to use emission reductions generated by AIJ projects after the end of the pilot phase during the commitment period for achieving compliance with their quantified emission limitation and reduction commitments under Art. 3 of the Kyoto Protocol, if they are consistent with the principles, rules, modalities and guidelines for the project based mechanisms under Art. 6 and 12 of the Protocol.

PAPER NO. 5: MAURITIUS

Please find below the concerns of the Republic of Mauritius on AIJ: inputs concerning Parties experience in using AIJ uniform reporting format and views on the process and information and experience gained and lessons learned with AIJ under the pilot phase.

2. Mauritius abides by decision 5/CP.1 and still believes that AIJ pilot phase has to collect enough experience before decisions can be taken on its usefulness.

3. Now that countries like India and China are implementing AIJ, they will have to share the experiences with non-Annex I Parties, especially those countries most vulnerable to Climate Change Impacts.

4. AIJ should concentrate to those areas for which there is an agreed scientific, technical and economic background to assess its benefits. AIJ to be applied solely to commitments on limitation of emissions from sources and not to enhancement of sinks.

5. Projects to cover a wide range of sectors mainly on energy, transportation, industries and house-hold activities. AIJ need to be undertaken by many countries with diverse geographical and socio-economic conditions.

6. Clarity and simplicity have to be the key words while using the uniform reporting format. Necessary experience must be acquired to fully answer the question, hence the need to encourage AIJ in as many countries as possible especially the Small Island Developing States and the least Developed Countries.

7. In light of future activities, especially the Kyoto Protocol with its clean Development Mechanism, reliable, consistent and comparable data will be needed to evaluate AIJ Performance and its transformation into CDM.

8. A mechanism need to be developed whereby UNFCCC focal point at national level be made aware of available AIJ Projects and their modus operandi between host and donor countries.

**Netherlands report on
Activities Implemented Jointly:
lessons learned**

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1. Introduction

The fourth Conference of the Parties in Buenos Aires invited the Parties to submit reports to the Climate Secretariat on AIJ (6.CP.4, Buenos Aires 1998). In order to facilitate the review process of the pilot phase, Parties were invited (1) to submit their views on experience gained and lessons learned with AIJ; (2) to report on the experiences in using the uniform reporting format; and; (3) to submit proposals on the organisation of a review for AIJ .

According to aforementioned invitation by the Conference of the Parties, the Netherlands have made a report on the experiences of the Netherlands' Programme on Pilot Projects for Joint Implementation. The intention of the Netherlands' submission to the Secretariat is to facilitate the review process of the pilot phase. This report includes:

- experiences and lessons of the implementation of AIJ projects;
- Netherlands' experiences in using the Uniform Reporting Format;
- recommendations with respect to the procedure of the AIJ evaluation.

Furthermore the Netherlands invited the host countries to comment on several aspects of AIJ co-operation. These comments are included in this document.

2. Experiences with AIJ

A. Organisation of the Netherlands AIJ Programme

The Programme on Pilot Projects for Joint Implementation (PPP-JI) is a combined effort by the Ministry of the Environment, the Ministry of Economic Affairs, and the Minister for Development Co-operation. The identification and implementation of AIJ projects take place under the responsibility of the Ministry of Economic Affairs (Central and Eastern European countries) and the Minister for Development Co-operation (developing countries). The Ministry of Economic Affairs has delegated the execution of their programme to an implementing agency (Senter).

Table 1 gives an overview of the AIJ projects that are under implementation or in preparation by Netherlands companies in co-operation with the government under the Pilot Phase. The Netherlands set up 8 projects in non-Annex I countries, and 20 projects in Annex I countries.

Table 1: *Netherlands Pilot Projects for Joint Implementation*

| Projects in Non-Annex I countries | Number of projects | Projects in Annex I countries | Number of projects |
|-----------------------------------|--------------------|-------------------------------|--------------------|
| Bhutan | 1 | Bulgaria | 1 |
| Bolivia | 1 | Czech Republic | 1 |
| Costa Rica | 2 | Hungary | 3 |
| Ecuador | 1 | Latvia | 1 |
| Honduras | 1 | Poland | 2 |
| Indonesia | 1 | Rumania | 4 |
| Uganda | 1 | Russian federation | 5 |
| | | Ukraine | 3 |
| Total of projects | 8 | | 20 |

The Ministry of the Environment is responsible for compiling annual reports on the progress of the Netherlands' AIJ programme. These reports are compiled for the parliament and the UNFCCC Secretariat. On behalf of the Ministry of the Environment the Joint Implementation Registration Centre (JIRC, an external agency) has been set up to register AIJ projects, verify the emission reductions achieved and to certify these reductions on an annual basis (more about JIRC in Appendix I).

Facilitating activities

The Netherlands government has made efforts to facilitate education and research on AIJ. Therefore several congresses and workshops have been organised on AIJ for different actors on a national and an international level.

To learn more about the concept of joint implementation (JI), the foundation Joint Implementation Network (JIN) was established in 1994. The main objective of JIN is to exchange information on project activities, on outcomes of intergovernmental negotiations, but also on scientific research on AIJ and on the mechanisms of the Kyoto Protocol (art. 6, 12, 17). JIN publishes the magazine Joint Implementation Quarterly (JIQ), which is sent to subscribers in over 130 countries. The Netherlands' government has learned that the JIQ has become a valuable source of information for persons active in the field of AIJ. JIN also has an internet homepage (www.northsea.nl/jiq) with an active discussion platform and a documentation centre with numerous publications.

Since 1995 the requests for information (about ongoing activities, contact addresses and documentation) and for research have grown enormously. Requests come from representatives of different professional circles: the Climate Secretariat, policy makers, private sector parties and scientists. An information point on AIJ, the Kyoto mechanisms and the implications of consecutive CoP decisions has proved to be very useful. Issues that are often subject of discussion are: the institutional capacity needed for successful AIJ, JI or CDM participation; the role of the private sector in project and emission trading activities; and which project types are eligible for art. 6 and CDM?

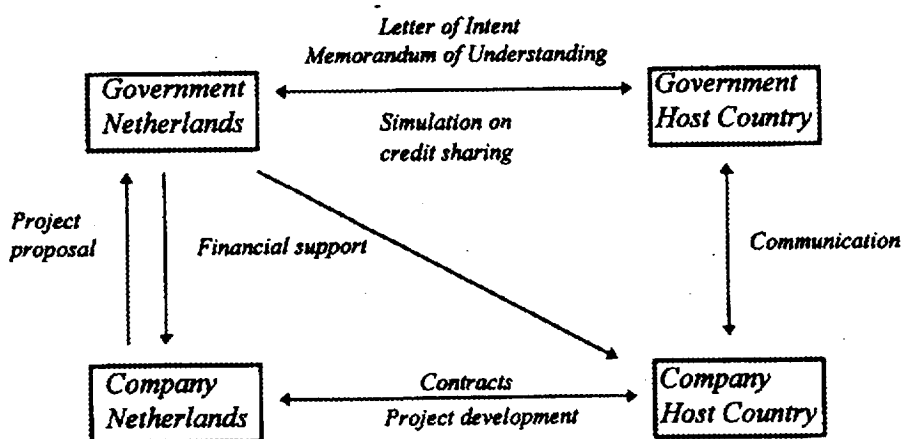
B. Experiences with AIJ

By developing project proposals and implementing AIJ projects, valuable experience (both positive and negative) that is relevant for designing JI and the CDM has been built up.

1. Complexity of the AIJ instrument

Overlooking the Pilot Phase so far, the most general lesson learned is the complexity of the AIJ instrument. An important reason for the complexity is the fact that AIJ projects are international investment projects: many different partners from the public and private sector with each different objectives are involved in the projects. Moreover, most AIJ projects have a complex financial structure. In figure 1, the complexity of an AIJ project is shown.

Figure 1. Example of the complexity an AIJ project



The specific AIJ criteria, as mentioned in the CoP1 decision at Berlin (1995), make projects very time consuming. This is mainly due to the requirement of governmental agreement and the fact that the quantification of GHG emission reduction requires baseline and monitoring measurements. The development of AIJ project proposals up to the actual implementation often takes more than a year.

2. *Government actions (domestic and international)*

The organisation of the PPP-JI as described above, brought about many discussions between the ministries involved, and may not be the most effective way of implementation. Co-operation with the designated authorities focuses on project development, on joint reporting and on governmental agreements (a Letter of Intent or a Memorandum of Understanding). Negotiations on the text for the mutual governmental agreement are in most cases very time consuming and joint reporting is often a difficult task. Reasons for this could be the general complexity of the AIJ instrument as described above, or insufficient capacity in some countries.

An unforeseen positive aspect of AIJ is that these contacts bring about discussions on climate change policy in host countries. For most of the countries involved, climate change and Joint Implementation are rather new policy fields. First contacts on AIJ projects result in an exchange of ideas on climate change related issues.

3. *Financing of AIJ projects*

Most AIJ projects receive government funding, because:

1. there is no direct incentive as companies in the Netherlands do not have a GHG reduction target;
2. the uncertain investment climate in most host countries;
3. the requirement of additionality of AIJ projects

The approval and implementation of AIJ projects is complicated by the state aid rules of the EU, OECD and WTO. To comply with EU rules, the project must be subsidised for 100 % and not just the additional component. These rules affect all government support from EU countries and in this case AIJ projects in CEE in particular. The consequence of this situation is a low cost efficiency from a government perspective.

Experiences show that there are several ways to calculate the cost of GHG emission reduction. Much depends on the baseline definition and the calculations of the revenues of the project. This complicates the comparison between different types of projects. The PPP JI used a calculation method developed by the Ministry of Economic Affairs which proved to be satisfactory. Outcome of calculations show that costs per ton of CO₂ vary considerably per country and type of project. In some cases, AIJ reduction options were more expensive than comparable domestic options. Reasons for this could be the less favourable investment climate in some of the host countries, bureaucratic investment procedures, and the extra costs for monitoring and baseline studies.

4. *Identification, development and implementation of AIJ projects*

A clear signal of the broad interest for the Joint Implementation concept in the Netherlands is the large number of AIJ project proposals that have been submitted to the Netherlands government. Proposals are submitted by consultants, local governments and the private sector both from the Netherlands and host countries. Proposals cover a large number of economic sectors (industry, transport, energy, household) and technologies (e.g. energy efficiency / fuel switching / sustainable energy / reduction of methane emissions).

The private sector in the Netherlands is interested in the JI concept. It is seen as a possible cost efficient climate change instrument, that could also stimulate commercial activities in CEE and developing countries. The private sector expresses the need for more certainty and clearness on the prospects of JI and CDM, especially where it concerns crediting and early action. The experience until today has shown that political awareness is also essential for the success of AIJ for both Annex I and Non-Annex I countries.

Experiences with the actual implementation of AIJ projects show that AIJ stimulates business co-operation between the EU and CEE and between the EU and developing countries. In this sense, AIJ projects bring about a considerable amount of capital transfer. The implementation of AIJ projects stimulates the transfer of knowledge and know-how in different fields (e.g. management skills, technical capabilities), also in several government agencies. In most AIJ projects, training and

transfer of knowledge are an integral part of the project activities. Where that has not been the case, the project implementation was less successful.

5. *Baseline and monitoring studies*

Baseline studies have been realised for most of the AIJ projects that are being implemented under the PPP-JI. We have the following experiences with base line studies:

- Every AIJ project needs its own baseline study. Some baselines are easier to determine than others. E.g. baselines for afforestation projects are more complicated than those for more technically oriented activities like cogeneration and wind energy.
- Another important lesson is that baseline information is mostly not available in CEE and developing countries. It can be very expensive to get relevant baseline measurement information. This has been a obstacle for development of AIJ projects.
- It is difficult to determine the level of certitude that is needed for baseline measurements. The level of certitude directly relates to the reliability of reduction figures, and to baseline and monitoring costs.

General guidelines for baseline are welcome but it is our experience that if necessary every project must have the freedom to develop its own baseline. Experience with baseline studies also shows that it is very well possible to implement these studies as a joint effort between the host country and the investing country. This is a good opportunity for climate change related capacity building. Monitoring studies are planned for 1999.

6. *Crediting*

The PPP-JI established 'CO2 certificates' (CO2 credits without a trade value) to gain experience with crediting and credit sharing. Discussions on the credit sharing have been very valuable. Although each Party has its own interest in these discussions, experience shows that it is very well possible to come to a satisfactory agreement on the distribution of credits. Based on this experience it is the Netherlands position that credit sharing could be determined for each individual project, under the responsibility of both parties involved.

Between Annex I countries, credit sharing negotiations were found necessary with a view to the future implementation of article 6 and the eligibility of AIJ projects under article 6 of the Kyoto Protocol during the budget period 2008-2012. No actual credits will be claimed, however, during the pilot phase.

3. **Experience with the Uniform Reporting Format (URF)**

3.1 *Use of the URF*

On behalf of the Netherlands Ministry of the Environment the Joint Implementation Registration Centre (JIRC) has prepared reports on AIJ projects on the basis of the URF. This report is subject of mutual signing by the designated authorities of the host country and the Netherlands. In the period 1997-1998 JIRC produced 36 reports on AIJ (11 in 1997 and 25 in 1998), which were subject of mutual approval by the designated authorities. In table 2 an overview is given of: the Netherlands AIJ projects; of the reports submitted to and accepted by the UNFCCC Secretariat in 1998. In Appendix II an overview is given of all Netherlands AIJ projects implemented or in high degree of preparation by now.

Table 2: Number of AIJ projects, submitted reports to the UNFCCC secretariat and acceptance by the Secretariat (June 1998).

| Host countries | Number of projects (June 1998) | Number of projects reported to the UNFCCC | Reports accepted by the UNFCCC |
|---------------------|--------------------------------|---|--------------------------------|
| <i>Non-Annex I:</i> | | | |
| Bhutan | 1 | 1 | 1 |
| Costa Rica | 2 | 1 | - |
| Ecuador | 1 | 1 | - |
| Honduras | 1 | - | - |
| Indonesia | 1 | - | - |
| Uganda | 1 | - | - |
| <i>Annex-I:</i> | | | |
| Czech Republic: | 1 | 1 | 1 |
| Hungary | 3 | 2 | 2 |
| Latvia | 1 | 1 | 1 |
| Poland | 2 | - | - |
| Rumania | 3 | 1 | 1 |
| Russian federation | 5 | 2 | 2 |
| Ukraine | 3 | 3 | - |
| Total | 25 * | 13 ** | 8 *** |

Comments on the table

- * Out of the 25 reports prepared, only 13 reports finally were approved by host and investing country and therefore appropriate to be submitted to the Secretariat;
- ** Out of 13 reports submitted to the Secretariat 5 reports were submitted before 1998 and 8 reports submitted in 1998;
- *** Out of 8 reports accepted by the Secretariat only 3 reports were approved in 1998 and integrated in the synthesis report to CoP-4: these reports exceeded the deadline and will be counted in the next synthesis report. The remaining 5 reports were based on the submissions of the year before.

• *Lessons learned from the use of the URF*

For each project, the Netherlands has tried to submit a URF to the UNFCCC secretariat, in cooperation with the host countries. Because of the fact that the Netherlands have chosen to report jointly with the counterparts, this was not always possible.

It proved to be time consuming to get an endorsement from the host countries, which resulted in exceeding the deadlines for reporting (Costa Rica, Ecuador and Ukraine) or no submission at all (Uganda, Hungary, Romania and the Russian Federation). Some reports were not ready to be submitted to the Secretariat because: 1. the Letter of Intent (governmental agreement needed in the Netherlands AIJ programme) was not mutually agreed upon (Costa Rica, Indonesia and Poland); 2. bottlenecks have occurred in the actual implementation of the projects (Poland and Honduras). In general it is felt that the internal procedure in host countries and investing countries with respect to the final approval of the reports seems to be very complicated and not transparent, which has complicated the communication.

• *Recommendations.*

The synthesis report - compiled by the secretariat of the UNFCCC - is based on the various URFs, submitted by Parties. It is felt by the Netherlands that a lot of valuable information provided in the URFs can not be found in the synthesis report. The URF consists of many detailed questions, while the synthesis report only addresses three main questions. It is recommended to use more of the information provided in the URFs and elaborate the synthesis report.

Besides, the URF includes no section in which the actual evolution of the project can be shown. According to the current method, the synthesis report is compiled on the basis of new information, but a lot of information from the earlier report(s) is not recorded. Our suggestion is to introduce a specific section concerning the previous reported facts and figures of a project, in order to give insight in the progress made by specific projects.

At this moment, the secretariat has developed stringent procedures regarding reporting (FCCC/SBSTA/1996/17) and endorsement by Parties. This means that a report on an AIJ project will only be accepted by the secretariat, if both national parties have dealt with the prescribed procedure. A simpler procedure on reporting is advisable.

3.2 *Experiences with the URF*

3.2a *General*

- The Uniform Reporting Format offers an overall insight of the different AIJ projects and the experiences of the parties involved in AIJ.
- The lack of clear guidelines for filling in the report and the missing of clear definitions, sometimes causes inconsistency in the information that could be gained from the reports.
- The URF follows the itemised list as mentioned in the relevant CoP1 decision on AIJ. The information is mainly static and only refer to the final outcome of the AIJ activities(the AIJ project).
- In order to gain experience with a new type of activities, it is also important to assess the whole project cycle. URF should facilitate a learning process based on the successes and failures of AIJ project development.

3.2b *Specific remarks on sections of the URF*

Section A3: Activity

- **Type of project:**
The reference is the IPCC classification; in addition it is preferable to include a definition of each type
- **Activity starting date:**
It is not very clear what is meant by the exact starting date of an activity. Either the moment you have an idea and or the moment the funding is arranged and or the moment the hardware is implemented? The given presentation will lead to various interpretations.
- **Activity ending date:**
The same comments as under starting date.
- **Stage of activity:**
only three possible stages are given: mutually agreed, in progress and completed. This will lead to various ways of interpretation.
- **Lifetime:**
Unclear definition of "lifetime".
- **Technical Data:**
The expected information is not defined.

Section A4: Costs

- **Total costs:**
It is not defined which costs should be taken into account and which not.
- **AIJ component:**
No definition is given of the AIJ component: is the part meant that is funded by AIJ programmes or is it only the part concerning the hardware costs and not the costs for transfer of knowledge?
- **Costs per avoided ton of CO2 equivalent:**
There are no clear guidelines in how to calculate the cost effectivity of an AIJ project.
Furthermore: who verifies the used reduction in this section with the one given in section E.2.2?

Section B: Governmental acceptance

- A guideline for this section could be the agreements mentioned in the agreements between two countries. But very often no such agreements are made and in addition a mutual signed Letter of Intent as a condition to report AIJ projects is not prescribed. Some clearness on the relation of a Letter of Intent to the governmental acceptance of the specific project and (joint) report would simplify the procedure on reporting AIJ projects.

Section C: Compatibility with

- In this section, usually reference is made to agreements between the Netherlands government and the designated authority in the host country. No further verification takes place on this subject.

Section D: Benefits

- The amount of detail about the benefits differs from project to project due to the lack of clear guidelines about benefits. Very different items are mentioned now in this section.

Section E1: Project baseline

- A lot of different methods are presented under this section. It would be interesting to know who implemented the baseline (and later on the monitoring study) and when. In the Netherlands there are guidelines for baseline studies (see Appendix 1). It could be very helpful to give a list of gases that can be filled in under the item "other".

Section E2.1: Projected emission reduction

- To verify the calculation of emission reductions very few data, due to the small number of relevant projects, are available.

Section E2.2: Actual emission reductions

- No information is available about the determination of the actual reductions. What methods or guidelines were used? Who performed the monitoring, was it an independent organisation? What is the accuracy of the given figures?

Section G: Capacity building

- It is not clear what type of information is requested in this section.

Section H: Additional comments

- This section is an important section as it gives information on experiences in the field of project development. It would be useful to add some specific questions in this section, for instance on the financial construction, on problems encountered during the development of the project, is it commercially viable (with and without AIJ contribution), etc.

Section H3

- This section is difficult to fill in. No clear definition of "negative" is given.

4. Proposal Preparations for a comprehensive review

According to decision 5/CP.1 the CoP should take a conclusive decision on the pilot phase and the progression beyond that, no later than the end of the present decade. In order to facilitate the CoP in taking these decisions a review process should be conducted including the consideration of institutional, procedural and methodological aspects as well as performance, impact and operational questions.

It is our view that SBSTA-10 should consider the submissions by Parties as asked for by decision 6/CP.4 para 5 and adopt, on the basis of the outcome of the considerations, a decision which makes it possible for the UNFCCC secretariat, in co-operation with Parties, to prepare a comprehensive review report which should be considered jointly by SBSTA/SBI-11. This review report should be the basis on which CoP-5 takes a conclusive decision on the pilot phase.

We propose that the comprehensive review addresses the following points:

- consistency of projects with the criteria in 5/CP.1 on the basis of a synthesis of the information included in the reports submitted by Parties using the uniform reporting format and other available assessments;
- emissions reductions and other environmental benefits achieved and associated costs, including transaction costs;
- contribution of projects to capacity building, institutional strengthening and stakeholder participation;
- experiences with using the uniform reporting format and recommendations for improving the URF;
- experiences from host countries in fulfilling the criteria that AIJ should be compatible and supportive of national environment and development priorities and strategies;
- methodological progress made by the secretariat in developing practical options for the items mentioned in the indicative list of methodological issues in paragraph 3(d) of the conclusions regarding AIJ of SBSTA-5 (FCCC/SBSTA/1997/4);
- experience gained with project identification, implementation, registration, monitoring, verification and certification procedures;
- experiences with incentives for investments used by governments;
- recommendations for guidelines and methodologies related to the project based mechanism under article 6 and 12 of the Kyoto protocol;
- recommendation for a conclusive decision on the pilot phase and the progression beyond that.

5. Opinion of counterparts on the Netherlands AIJ programme

To get a clear view on AIJ the Netherlands also invited host countries to comment on several aspects of AIJ co-operation. An outline of the received comments is included below. The full comments, however, are added to this report (appendix IV). Because this report had to be concluded at short notice, not all host countries were able to comment on the Netherlands AIJ programme.

A. AIJ project experience

Bulgaria

It is expected that AIJ projects will provide experience to the government, stockholders and factory owners and that confidence in the economical, technical and environmental benefits of the projects will grow. Bulgaria has a good potential for AIJ/JI projects in energy efficiency and expects good incentives in the form of foreign investments and technology improvements. Barriers for AIJ to be overcome are: problems with baseline identification and measurement of emissions reduction; little dissemination of information to companies and NGOs; absence of an AIJ/JI infrastructure for registration of projects and co-ordination of JI policy; absence of incentives for local/municipal initiatives.

Bolivia

Before the signing of Letter of Intent profound preparation and fair negotiations have taken place. The government of Bolivia believes the AIJ projects will make a positive contribution to the economic and social development objectives as well as to the UN Framework Convention on Climate Change. In addition, with reference to the process of fair negotiations on credit sharing, Bolivia expects that this will result in a substantial contribution to the decision of the Conference of the Parties on the issue of AIJ and the flexible mechanisms under the Kyoto Protocol.

The government of Bolivia finally believes that the intense co-operation with the Netherlands (including all private parties participating in both countries) on AIJ projects, especially on the issues of certifying of results, will have a positive effect on the joint reports to the UN FCCC Secretariat and future co-operation under the UN Framework Convention on Climate Change.

Bhutan

Bhutan supports AIJ provided that AIJ is cost effective and it will lead to the required global greenhouse gas reductions. In addition Bhutan expects that AIJ projects will and should play a constructive role in overcoming deficit financing for climate change projects.

Key lessons based on the Kilung Chuu Micro-Hydel AIJ project under the Sustainable Development Agreement with the Netherlands in May 1994:

- the AIJ project has a significant development impact;
- the AIJ project however has a minor climate change impact;
- the AIJ project increased the institutional capability in relation to climate change and global environmental issues
- the importance of negotiating power is recognised;
- AIJ should serve:
 1. the basic development and social needs and respect of national development;
 2. transfer of technology and bring about sustainable development to avoid fossil fuel dependency and unsustainable pollution burden along with the scope for mutual crediting;
 3. AIJ should increase the transfer of resources from the North to the South.
- the experience of this project is potentially valuable for both countries;
- bilateral sustainable development agreements could provide valuable means for other developing countries on the issues of sound environmental development and positive benefits to both partners.

Reservations on AIJ:

- AIJ could be a way for industrialised countries to deal with their commitments on GHG reductions;
- the basis of legal expertise of small nations on equity issues could be a bottleneck to negotiate with large multinational companies;
- AIJ may lead to less GHG emission reductions in industrialised countries;
- the methodologies for transfer of emission offset credits are not determined;
- AIJ funding may be replaced unjustly through traditional donor bilateral funding.

Latvia

The government of Latvia approved two pilot projects under the pilot phase for AIJ. Those projects have encountered difficulties in establishing baseline scenarios and GHG emissions projections. The main reason for these difficulties is the transition of Latvia to a market economy. Because of the economic transition Latvian experts are not able to use business-as-usual scenarios and common opinion has not been reached on the baselines and activities scenarios. Furthermore the basic scenario for electricity is variable because of variable hydro power. The Latvian experts have to work with specific scenarios and are not familiar with the methodology for measuring, however the government is not able to finance research on this issue and asks for Netherlands support.

Czech Republic

The co-operation with the Netherlands bodies involved in the AIJ project in the Krkonoše and Sumava National Parks is satisfactory: it is properly managed and implemented and contributes to the recovery of forestry in aforementioned areas.

Poland

Based on the analysis of the projects, the Polish - Dutch AIJ projects are seen as an excellent example of what AIJ projects can achieve. The pilot phase is considered as a good opportunity to gain experience in different fields. Among other things, the projects executed in Poland (Byczyna and Szamotuly) showed relevant aspects for AIJ:

- setting-up an effective project team is very important;
- tools for monitoring the progress of the report are necessary;
- setting a realistic operational and financial plan is essential;
- good co-ordination between several partners is important;
- securing financing and setting-up joint venture companies prior to opening the project tender is a must.

Furthermore, Poland emphasises the importance of good communication, both internal project communication as well as external communication. Internal communication is realised by means of personal visits and talks, e-mail and internal project reporting. External communication includes a.o. articles in the local press and local television presentations, public awareness campaigns, seminars on AIJ, preparation of lecture material, reporting to supervising bodies and an evaluation mission of Senter.

The techniques which were successfully demonstrated in the AIJ projects are replicable in a large number of coal-dependent units. Some organisational and investment problems have given cause to reflect on how to anticipate these problems and prevent them in the future. The Pilot Phase presents an important opportunity to experiment with different approaches to international and multi-lateral negotiations and implementation.

B. Uniform Reporting Format (URF)

Latvia

It would be useful to simplify the URF for small scale projects and to use the current URF for large scale JI projects.

Poland

In Poland the URF is prepared by the JI secretariat, the national focal point, reporting agency, local parties. In using this format, Poland estimates the following points:

- The scope of section E.1. (project baseline) is not defined in detail, and the question arises how much information should be presented in that section. In this respect, Poland asks if the abstract of the baseline study must include an evaluation of the baseline for the environmental aspects (not the GHG emissions) and of the technical state.
- Poland considers the issue of other environmental aspects (section E.2) to be very interesting when considering emission reductions.

C. Proposal preparations for a comprehensive review

Bulgaria

The following preferable criteria for JI are outlined by Bulgaria:

- project investments should be grants, not loans; projects should not be commercially feasible;
- projects should be supported by the national strategy of the host country;
- national climate policy should not decrease because of JI;
- environmental impact assessment of the projects is desirable;
- existing foreign aid must not be replaced by JI;
- local expertise should be involved in JI-projects;
- a reliable GHG inventory is needed for the establishment of baselines;
- economic agreements on JI with economies in transition should be for ten years at the most, to prevent a legacy of large emissions for future governments;
- credits should be formally approved on an annual basis, based on the project emissions reduction.

Poland:

For the evaluation of their projects in Byczyna and Szamotuly, Poland used the following criteria:

- Projects must comply with the standards adopted by the Conference of the Parties;
- Projects must be consistent with the National Environmental Policy, must promote the principles of sustainable economic development with optimisation of natural resource allocation and must be beneficial to Poland in the long term;
- Financial resources devoted to the implementation of the JI projects must be cost-effective.

Some issues to be evaluated of the AIJ Pilot Phase are:

- Time invested in negotiations and finalising bilateral agreements between donor and host countries;

- Well-established procedures are especially valuable for the following issues: a) interpretation of contract clauses and b) defining roles of particular parties within the project;
- Preparation's cost of project proposals;
- Methodologies for setting the baseline and procedures for it's approval;
- Measurement of environmental benefits;
- Sharing credits between donor and host countries;
- Monitoring the project progress;
- Contribution to capacity building;
- Publicity and public awareness campaigns on JI concept and projects

Appendix I The Joint Implementation Registration Centre

The Joint Implementation Registration Centre has been set up to establish the registration and certification scheme for emission reductions. The criteria for registration and certification have been established in accordance with the rules of decision 5.CP.1.

- **Registration:** to apply for certification, a project needs to be registered by the Joint Implementation Registration Centre. A project should fulfil all the AIJ criteria as mentioned in the PPP JI like a Letter of Intent between the governments concerned, real emission reduction compared to a baseline situation, training component, etc.
- **Verification:** to be able to determine the reduction of greenhouse gas emissions, first a baseline has to be established, which determines the situation before the start of the project. The reduction of emissions will be determined annually by means of a monitoring study of that particular year. The monitoring study is examined by the JIRC. The Minister of the Environment subsequently approves the emission reduction.
- **Certification:** an independent body checks the procedure as applied by the JIRC. If the results of this check are positive, the Minister of the Environment issues a certificate, which states the reduction of emissions. This certificate concerns one monitoring year only.

Appendix II Overview of actual Netherlands AII projects

| Project title | Project type | Project owner (executor) | Participants in Host Country | Starting date | Duration (years) | Annual emission reduction (ktonnes CO ₂) | Cost per avoided tonne CO ₂ (USD) | Letter of Intent |
|---|---------------------------------------|----------------------------|---|------------------------------------|------------------|--|--|------------------|
| Bolivia | | | | | | | | |
| Rural electrification in the San Ramón Area | Fuel conversion | CRE | Cooperativa Rural de Electrificación (CRE in Santa Cruz | Building phase: 1 Life time: 15 | - | - | - | yes |
| Bulgaria | | | | | | | | |
| District Heating | Energy saving | Government | | 01-01-1999 | - | - | - | yes |
| Czech Republic | | | | | | | | |
| Krkonoše, Sumava | Reforestation | Sep/Face | Krkonoše National Park, Sumava National Park | 01-10-1992 | 99 | 100 | 15 | yes |
| Hungary | | | | | | | | |
| Energy efficiency improvement by Hungarian municipalities and utilities | Energy saving, fuel switch | Government (Novem BV) | EGI/GEA | 01-01-1994 | 20 | 17 | 8 | yes |
| RABA/IKARUS compressed natural gas engine project | Technology transfer, monitoring study | Government (Delec, TNO) | RABA, IKARUS, AUTOKUT | 01-01-1995 | 20 | 0-25 | 16 | yes |
| Redesign energy process at Bacstej | Energy saving | Government (Hanze Consult) | Bacstej Kft. | 01-01-1998 | 10 | 5 | 138 | yes |

| Project title | Project type | Project owner (executor) | Participants in Host Country | Starting date | Duration (years) | Annual emission reduction (ktonnes CO ₂) | Cost per avoided tonne CO ₂ (USD) | Letter of Intent |
|---------------|--------------|--------------------------|------------------------------|---------------|------------------|--|--|------------------|
|---------------|--------------|--------------------------|------------------------------|---------------|------------------|--|--|------------------|

| | | | | | | | | |
|--|---------------|------|---------------|------------|---|-----|---|-----|
| Latvia | | | | | | | | |
| Boiler replacement and cogeneration in Adazi and Lielvarde | Energy saving | EDON | EDON Latvijas | 01-11-1997 | - | 3.4 | - | yes |

| | | | | | | | | |
|---|--|------------------------|-----------------------------------|------------|----|-----|----|-----|
| Poland | | | | | | | | |
| Sustainable heat and power | | EDON | Energetyka Poznanska | 01-11-1997 | 15 | 23 | 30 | yes |
| Improvement of energy supply at Byzcyna | Replacement of coal boilers by low NO _x boilers | Government (TNO / MEP) | Municipality of Byzcyna | 01-01-1998 | 15 | 7 | 8 | yes |
| Anaerobic waste water treatment in sugar industry | Reduction of methane | Government (Haskoning) | State Committee for Food Industry | 01-01-1998 | 10 | 115 | 1 | yes |
| Energy saving at heat and power plants | Efficiency improvement | Government (KEMA) | Ministry of Energy | 01-01-1998 | 5 | 180 | 2 | |

| | | | | | | | | |
|---|---------------------------------------|--|--------------------------------------|------------|----|-----|---|-----|
| Romania | | | | | | | | |
| Emission reduction at power plant | Energy saving | Government (Sep/KEMA) | RENEL | 10-10-1997 | 5 | 270 | 1 | yes |
| Improvement of waste water infrastructure at Targu Mures | Energy saving and methane reduction | Government (Haskoning) | RAGCL (water company of Targu Mures) | 01-01-1998 | 10 | 18 | 7 | yes |
| Energy efficiency in drinking water supply | Improvement of damaged infrastructure | Government (DHV) | RAGCL | 01-01-1998 | 2 | - | - | yes |
| Reduction of CO ₂ emission at SC Rato Refinery | Energy efficiency | Government (Raytheon Engineers and Constructors) | Rato SA Oil Refinery | 1998 | - | - | - | yes |

| Project title | Project type | Project owner (executor) | Participants in Host Country | Starting date | Duration (years) | Annual emission reduction (ktonnes CO ₂) | Cost per avoided tonne CO ₂ (USD) | Letter of Intent |
|---------------|--------------|--------------------------|------------------------------|---------------|------------------|--|--|------------------|
| | | BV | | | | | | |

| Russian Federation | | | | | | | | |
|---|---------------------------------------|---------------------------------------|-------------------------------|------------|----|-----|-----|-----|
| Horticultural project Tyumen | Agri- and horticulture, energy saving | Government (VEK) | RITZA | 01-11-1994 | 15 | 2 | 100 | yes |
| Sanitary landfill with energy recovery in Moscow region | Reduction of methane | Government (Grontmij) | Geopolis Consulting Engineers | 01-01-1994 | 10 | 265 | 4 | yes |
| Energy saving at brick company in Tatarstan | Energy saving | Government (Haskoning) | KCCM | 01-01-1998 | 2 | - | - | no |
| Tikhvin district heating | Renewable energy | Government (Biomass Technology Group) | ECOENG | 01-01-1998 | 2 | - | - | yes |
| Boilerhouse Bolshemurashkino | Energy saving | Government (Tebodin) | Government of Nizhny Novgorod | 01-01-1998 | 2 | - | - | no |

| Ukraine | | | | | | | | |
|-----------------------------|---------------|------------------------|---------------------------------------|------------|---|---|---|-----|
| Energy saving at glassworks | Energy saving | Government (Haskoning) | St. Committee for Energy Conservation | 01-01-1998 | 2 | - | - | yes |

| Project title | Project type | Project owner (executor) | Participants in Host Country | Starting date | Duration (years) | Annual emission reduction (ktonnes CO ₂) | Cost per avoided tonne CO ₂ (USD) | Letter of Intent |
|---|------------------------|--------------------------|-------------------------------------|---------------|------------------|--|--|------------------|
| Anaerobic waste water treatment in sugar industry | Reduction of methane | Government (Haskoning) | St. Committee for the Food Industry | 01-01-1998 | 10 | 115 | 1 | yes |
| Energy saving at heat and power plants | Efficiency improvement | Government (KEMA) | Ministry of Energy | 01-01-1998 | 5 | 180 | 2 | yes |

Bhutan

| | | | | | | | | |
|--------------------------------|--------------------|------------------|------------------------------|------------|----|----|------|-----|
| Kilung-Chuu Micro Hydel Bhutan | Sustainable energy | Government (ETC) | Division of Power (DoP), NEC | 01-01-1996 | 10 | <1 | >150 | yes |
|--------------------------------|--------------------|------------------|------------------------------|------------|----|----|------|-----|

Costa Rica

| | | | | | | | | |
|--|----------------------|------------------|---------------------------------------|------------|----|-----|---|-----|
| Waste water treatment at coffee plants | Reduction of methane | Government (BTG) | Private and co-operative coffee mills | 01-11-1997 | 10 | 127 | 4 | yes |
|--|----------------------|------------------|---------------------------------------|------------|----|-----|---|-----|

Indonesia

| | | | | | | | | |
|---------------|---------------|----------|--------------------------|------|----|---|---|----|
| Gunung Leuser | Reforestation | Sep/Face | Gunung Leuser Foundation | 1998 | 99 | - | - | no |
|---------------|---------------|----------|--------------------------|------|----|---|---|----|

Ecuador

| | | | | | | | | |
|----------|---------------|----------|--------|------------|----|-----|---|-----|
| Profafor | Afforestation | Sep/Face | INEFAN | 01-06-1993 | 99 | 350 | 4 | yes |
|----------|---------------|----------|--------|------------|----|-----|---|-----|

Uganda

| | | | | | | | | |
|----------|---------------|----------|---------------------------|------------|----|-----|---|-----|
| UWA-Face | Afforestation | Sep/Face | Uganda Wildlife Authority | 01-08-1994 | 99 | 200 | 8 | yes |
|----------|---------------|----------|---------------------------|------------|----|-----|---|-----|

Please note that the cost per avoided tonne carbon dioxide is calculated as the present value of the annual government's contribution to the A/J-project divided by the annual reduction emission, excluding operational costs or benefits. Most calculations are based on information from the projects' feasibility studies, since the projects have only started recently. Note also that the 1998 projects in Romania, Russian Federation and Ukraine are in a two years' start-up phase: after these two years their real lifetime will be given in the table.

Appendix III General guidelines for baseline studies

The baseline study aims to survey the emissions of greenhouse gases and other environmental aspects before the start of the Joint Implementation Pilot Project. The baseline is determined on the basis of information from the applicant on emissions of greenhouse gases during a period of twelve consecutive months which end before the starting date of the project. Furthermore, the applicant must indicate which developments will influence the baseline during the course of the project. To establish the baseline objectively the applicant must provide information to the Joint Implementation Registration Centre through measurements and/or calculations.

The guidelines for the baseline study are subdivided in three chapters:

- I Project description*
- II Information to determine the baseline*
- III Quality of the information*

I Project description

- Have there been modifications in the project in relation to the date of registration? If so, describe accurately what these modifications are. Consider changes in participants, project implementation, greenhouse gas emissions, other environmental aspects, costs calculations or the training component.

II Information to determine the baseline

- Describe which method has been used for the baseline study
- Describe who has carried out the baseline study and justify this choice
- Describe which developments or factors may influence the current greenhouse gas emissions or sequestration of greenhouse gases or other environmental aspects during the course of the project. Consider technological developments, economic development, planned investments, etc.
- Describe the emissions by sources and sequestration of greenhouse gases by sinks during twelve consecutive months before the starting date of the project. The year chosen must be representative for the activities on the location.
- If the application concerns a current project, an estimate must be made of the emissions of greenhouse gases before the start of the project. The way in which this estimate was made has to be substantiated.
- When it comes to a "green field" situation, that is a situation in which new construction is taking place and not a modification of an existing situation, an estimate must be made of the greenhouse gas emission levels before the start of the project. The way in which this estimate has been made must be substantiated.
- Describe the baseline on the basis of subject-specific emission data (equipment, engines, trees, crops, etc.). Describe also, if necessary, the fuel data for the equipment used. Provide a reference for the emission and/or fuel data (for example: IPCC).
- Describe which other environmental aspects play a role before the start of the project (in relation to air, noise, odour, water, soil, human health and bio diversity effects). Does the project meet Dutch environmental and safety standards? In all other cases the project must satisfy the environmental and safety standards as they apply in the host country for similar activities.

III Quality of the information

- An overview must be presented in a transparent way of the methods, data and calculations used to establish the emissions reported, emission reductions and sequestration of greenhouse gases.
- The accuracy of the data presented must clearly emerge.
- The emission data for each greenhouse gas must be reported in kg or tonnes (1 tonne = 1000 kg).
- All assumptions used in the calculations must be reported, including the external factors which may influence the greenhouse gas emissions during the course of the project, also in the absence of the project (energy prices, legislation, economic and technological developments, etc.)
- References must be provided for all literature used. Literature must be relevant, recent and publicly obtainable.

Appendix IV

BHUTAN

**ACTIVITIES IMPLEMENTED JOINTLY PILOT PROJECT, KILUNG
CHUU MICRO-HYDEL: GLOBAL PARTNERSHIP FOR SUSTAINABLE
DEVELOPMENT: A CASE EXAMPLE FROM BHUTAN**

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ACTIVITIES IMPLEMENTED JOINTLY PILOT PROJECT, KILUNG CHUU
MICRO-HYDEL: GLOBAL PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT: A CASE
EXAMPLE FROM BHUTAN

The Royal Government of Bhutan and the Government of Netherlands have jointly embarked on an Activities Implemented Jointly (AIJ) project, the Kilung Chuu Micro-Hydel. This paper will address the Bhutan-Netherlands cooperation. By installing a micro-hydel system of 100 KW in an area that was previously not electrified, a reduction in deforestation through reduced fuelwood consumption was expected, leading to reduced greenhouse gas emissions from the area. The project aims to reduce greenhouse gas emissions while meeting the basic social and economic development needs of the local people.

The governments of Netherlands and Bhutan believe that in order to implement sustainable development, global partnership is needed. Therefore, the governments of Netherlands, Bhutan, Benin and Costa Rica forged a partnership through the signing of the Sustainable Development Agreement in March 1994. Through this partnership, new concepts could be developed and new experiments in development programs could be conducted.

Bhutan and Netherlands are working towards achieving a sustainable development partnership. Energy, biodiversity and culture have been identified for operationalizing the concept of sustainability. The Bhutanese and Dutch are also exploring new areas such as AIJ. The large forest areas in Bhutan (72% forest cover) could serve as potential carbon sinks to the greenhouse gases emitted by the Netherlands.

The implementation of the Kilung Chuu Micro-Hydel project raised the different visions of AIJ held by both countries. For the Bhutanese, the commitment to sustainable development, the need to get experience and technology were seen as important criteria. While the realization of future commitments and cost-effectiveness were important criteria for the Dutch.

Some of the key lessons learnt from this AIJ project for Bhutan were:

- the importance of negotiating power;
- the realization that AIJ projects must meet basic development needs and respect national development policies;
- technology transfer must take place; and
- AIJ projects must bring an increase in resources from the North to the South.

Bhutan has embarked on an AIJ project so that the country can work towards developing methodologies and creating capacity in implementing AIJ projects. The Bhutanese believe that AIJ projects will play a constructive role in overcoming deficit financing for climate change projects and bring about the required global greenhouse gas reduction.

INTRODUCTION

Bhutan is a small country located in the Eastern Himalayas. It is landlocked between China to the north and India to the east, west and south. It covers an area of 46,500 Square Kilometre. The country lies between two biogeographical realms: the Palearctic realm of the temperate Euro-Asia and the Indo-Malayan realm of the Indian sub-continent. The result is a nation rich in biodiversity. The biomes in Bhutan stretch from sub-tropical in the south through temperate in the central interior, to an alpine zone in the north. Bhutan has been declared as one of ten global "hot-spots" for the conservation of biological diversity. Many ecologists believe that Bhutan represents the last best chance for conservation in the Eastern Himalayas, a region considered of critical importance to the global efforts to conserve biological diversity.

While many other countries have witnessed a deterioration of their environment, Bhutan has emerged into the twentieth century with its natural resource base largely intact. The traditional conservation ethic, the Buddhist religion, animism, enlightened leadership and low population pressure have all contributed to the preservation of Bhutan's environment.

The National Assembly mandated the Royal Government to keep forest cover over 60% of the total land area (73rd session, National Assembly, 1995). The government has also set aside 26.23% of the country as protected area. Bhutan, with a population of 639,430.00 (Central Statistical Organization, 1996) and only 16% (NES, 1998) arable land has devoted over 26% of the country to a protected area system and has committed itself to over 60% of the country under forest cover.

Bhutan is a least developed country in South Asia but has made a commitment to pursue a sustainable path of development. This political commitment has resulted in global partnerships for sustainable development. One of the most innovative partnerships is the Sustainable Development Agreement (SDA) with the governments of Netherlands, Benin and Costa Rica. This paper will discuss the factors and address the steps that were undertaken to make the Bhutan-Netherlands cooperation a reality. This paper will also address what lessons there are for other countries intending to follow a similar path. One of the examples of this cooperation is the implementation of the Kilung Chuu Micro- Hydel project.

BHUTAN AND THE NETHERLANDS: SUSTAINABLE DEVELOPMENT AGREEMENT

The development process in Bhutan started in 1961. This late start in economic development, the country's enlightened leadership and the traditional conservation ethic have enabled Bhutan to have its natural resource base largely intact. Bhutan, in the global forum, has stressed that it will not pursue development at the cost of its natural environment. Therefore, Bhutan, a small country has become recognized in the environmental field as a country that is committed to preserve its environmental heritage.

The Government of Netherlands believe that in order to implement sustainable development, global partnership is needed. The Government of Netherlands felt that the United Nations Conference on Environment and Development (UNCED) did not make a real breakthrough. Countries from the North and the South had divergent view points. Therefore, the Government of Netherlands decided to forge a partnership with Bhutan, Benin and Costa Rica through the signing of the Bilateral Sustainable Development Agreement. These countries were identified by the Netherlands as countries that they believed were trying to implement environmentally sound development.

The partners of this Bilateral Sustainable Development Agreement felt that through this partnership new concepts could be developed and new experiments with environmentally sound development programs could be conducted. This agreement was based on the principle that sustainable development is a joint responsibility of both the North and South. The other leading principles of these agreements are reciprocity, equity and participation. The principle of reciprocity recognizes that development partners can contribute to each others development process. This belief runs contrary to the traditional donor-recipient relationship. This principle of reciprocity is an instrument towards the goal of sustainable development. The partners of the Sustainable Development Agreement meet regularly and try to form a global coalition at international conferences to put forward a lobby for sustainable development. The SDA countries aim to put forward a more environmentally sound position at conventions where many countries are mired in regional politics and nation's interests.

Bhutan and Netherlands are currently working on a number of integrated sustainable development projects with the view towards achieving sustainable development models. The Bhutanese benefit from the financial assistance while the Dutch benefit from the traditional conservation ethic and the pristine environment of the Bhutanese people. The

Bhutanese and the Dutch have identified the following areas namely, energy, biodiversity and culture as areas for operationalizing the concept of reciprocity. The Bhutanese and Dutch are also exploring new areas such as carbon trading. The large forest areas in Bhutan could serve as potential carbon sinks to the green house gases (GHG) emitted by the Netherlands.

BHUTAN AND BOX 1.1 SOURCES AND SINKS INVENTORY, 1998

The NEC recognized the importance of evaluating the sources and sinks of GHG in Bhutan. The results of this preliminary study with limited data sources concluded that at current economic development status with existing landuse patterns and forest cover, Bhutan is a net sink of GHG.

Total emissions of greenhouse gases in Bhutan 1994

| Sources | CO ₂ (Gg) | CH ₄ (Gg) | N ₂ O (Gg) |
|--------------------------------|-------------------------------------|-------------------------|--------------------------|
| Energy | 91.90 | 0.00 | 0 |
| Fuel Combustion | 91.90 | 0.00 | 0 |
| Fugitive emission | NE | 0.00 | 0 |
| Industrial Processes | 159.69 | NE | 0 |
| Agriculture | NE | 12.22 | 1.40 |
| Land Use change and Forestry | (-) 48,910.29 | NE | NE |
| Net emission | (-) 48,658.70 | 12.22 | 1.40 |
| Emissions in Giga grams | Carbon dioxide | | 251.59 |
| | Methane | | 256.62 |
| | Nitrous Oxide | | 434.00 |
| Total Emissions | | | 942.21 |
| Net Sequestration | land use change and forestry | | 48910.29 |
| Total Sequestration | | | 47968.08 |

Based on the Global Warming Potential (GWP) values [21 for methane and 310 for nitrous oxide (SAEFL)], the CO₂ equivalents of the methane emission and nitrous oxide in Bhutan are 256.62 Gg and 434.00 Gg respectively. NE-Not Estimated Gg-Gigagrams.

NEC, 1998

CLIMATE CHANGE

Climate Change is an important area of cooperation between the Governments of Netherlands and Bhutan. Both countries face adverse implications from climate change. In Bhutan, climate change will place additional stress on the already fragile mountain environments. Many species will be vulnerable to global warming because the possibilities for migration to new areas are limited. The other long-term implications of global warming are that mountain species will dwindle and could ultimately go extinct. The threats are greatest for endemic species which are limited to an area.

One of the clearest signals of climate change comes from glaciers, which are in retreat on every continent of the globe. In Europe, the Alps are supposed to be retreating at 10-20% resulting in large runoffs. The costs of engineering works to prevent the torrential runoff

in countries like Switzerland are very high. However, in countries like Bhutan where we have no proper disaster management, glacial melting can result in large floods with heavy human cost. Not only is there the devastation caused by the floods, but there is also the problem of revegetation of exposed areas following deglaciation leaving the ground vulnerable to erosion and rock slides for centuries.

The United Nations Framework Convention on Climate Change identifies both mountain ecosystems and landlocked or transit countries such as Bhutan as areas subject to extreme adverse effects of global climate changes (UN Document, A/AC.237/1818; May 1992).

Bhutan recognizes the significance of a global convention aimed at the prevention of global warming. Bhutan was among the 150 countries that signed the United Nations Framework Convention on Climate Change (UNFCCC) at Rio de Janeiro in 1992. The Royal Government of Bhutan ratified this convention at the 73rd session of the National Assembly on August 25th, 1995. After the ratification of the UNFCCC, the RGOB designated the National Environment Commission (NEC) as the focal point for climate change activities in Bhutan. The Royal Government also set up a National Climate Change Committee headed by the Planning Minister.

The United Nations Framework Convention on Climate Change (UNFCCC), aims to stabilize anthropogenic carbon dioxide (CO₂) emissions to levels that do not threaten the global ecosystem. To this end, the Convention calls on its parties to reduce their emissions and to enhance "sinks" of GHGs. One of the innovative and controversial measures that can be used to reduce emissions are Activities Implemented Jointly. This is a set of activities where a country could earn credits towards their commitments under the convention in return for their investment in specific projects that yield reductions of GHG sources or enhancement of sinks in other countries.

Therefore AIJ is reduction of emissions by one Party (investor) on the territory of another (host). Article 4.2 of the convention states specifically that each of the Parties must adopt policies and take corresponding measures on the mitigation of climate change, by limiting its anthropogenic emissions of GHGs and protecting and enhancing its GHG sinks and reservoirs. These Parties may implement such policies and measures jointly with other Parties and may assist other Parties in contributing to the achievement of the objective of the Convention.

The international community has long debated on how to put into effect the actual implementation and practice of AIJ and how crediting should take place. These debates have led to the conclusion that the actual opportunities and constraints of AIJ can only be adequately discussed in practice. The Conference of Parties to the FCCC therefore decided at the first Conference of Parties in Berlin, 1995 to start a Joint Implementation/Activities Implemented Jointly pilot phase, until the year 2000. During this phase, the achieved mitigation effects from AIJ can not be credited for national obligations. The Secretariat of the UNFCCC have made preliminary conclusions about the AIJ pilot phase. The regional concentration of the pilot phase AIJ projects was pronounced. There were very few projects in Asia and Africa. The Bhutan AIJ project was one of the few AIJ projects in Asia. Most of the projects were in economies in transition (EIT) and in Latin America and the Caribbean. The AIJ projects were also seen to be low investment with limited contributions to GHG abatement. Developing country parties also approached AIJ cautiously.

BHUTAN AND ACTIVITIES IMPLEMENTED JOINTLY

Bhutan is supportive of Activities Implemented Jointly (AIJ) on certain premises namely, that AIJ must be cost effective and must lead to real reductions of GHG.

AIJ could serve to:

- ◆ be cost effective as there are large differences in the costs of reducing GHG emissions between countries;
- ◆ reduce GHG emissions while at the same time contribute to the socio-economic development of the host country; and
- ◆ bring about sustainable development and technology transfer by helping developing countries avoid fossil fuel dependency and the unsustainable pollution burden of the traditional development path.

Some of our reservations with AIJ are:

- ◆ this could be a way for industrialized countries to buy their way out of reducing GHG emissions;
- ◆ equity issues could prove to be difficult for small nations with little legal expertise to negotiate with large multinational companies;
- ◆ the methodologies for transfer of emission offset credits have not been developed;
- ◆ that AIJ projects may lead to little GHG emission cuts in industrialized countries; and
- ◆ that AIJ funding may take place of traditional donor bilateral funding.

Despite these issues, Bhutan supports AIJ projects that are compatible with our socio-economic development needs along with the scope for mutual crediting. We feel that what is needed is a practical hands-on experience with AIJ.

A CASE STUDY: KILUNG CHUU MICRO-HYDEL, BHUTAN

Therefore the Governments of Netherlands and Bhutan decided to bring the application of AIJ closer to reality and increase the likelihood that such projects can play a constructive role in overcoming deficit financing for climate change related projects and bring about the required global GHG reduction. Under this AIJ pilot phase the Dutch Ministry of VROM/Housing, Spatial Planning and the Environment has initiated an "AIJ" project in Bhutan.

RATIONALE FOR THE PROJECT

Through installing a micro hydel system of 100 KW in a previously not electrified area, a reduction in deforestation through reduced fuelwood consumption was expected, leading to reduced GHG emissions from the area. By spring 1996, the Division of Power had identified the Kilung-chuu river as the most suitable location for the project. Currently in the Lhuntshi district, one of the twenty districts in Bhutan, there is only one micro hydel station, the Luntshi station which is 20 kw and supplies very few villages. The rest of the Dzongkhag, has no power station. Despite the fact that Bhutan generates approximately 1623.3 Gwh (million units per year) from Chukha hydel, micro-hydels are the only option for remote communities in Bhutan. The costs of transmission lines are prohibitively expensive.

| Source | 1990-1991 | 1991-1992 | 1992-1993 | 1993-1994 | 1994-1995 |
|------------------|-----------|-----------|-----------|-----------|-----------|
| Mini hydel | 6.619 | 7.364 | 5.046 | 5.489 | 5.880 |
| Micro hydel | 0.876 | 0.876 | 1.445 | 2.015 | 2.015 |
| Chukha hydel | 1542.408 | 1554.370 | 1677.812 | 1679.239 | 1623.310 |
| Diesel Power | 0.046 | 1.315 | 3.059 | 1.085 | 1.069 |
| Total Generation | 1549.949 | 1563.925 | 1687.362 | 1687.828 | 1632.274 |

PROJECT DESCRIPTION

The Kilung Chuu project is divided into two parts the hardware component which comprises the actual installation of the micro hydel system handled completely by the Division of Power.

The software component aims to assess:

- ◆ the impact of the project on net GHG emissions over a substantial time frame;
- ◆ socio-economic development impact of the project over a substantial time frame;
- ◆ involvement of local stakeholders in the project development and organization;
- ◆ quantify the cost-effectiveness of the climate change mitigation through the project;
- ◆ develop institutional capacity;
- ◆ credit sharing of the project by stimulating effects for and contributions of partners;
- ◆ test and adapt the AIJ monitoring methodology; and
- ◆ disseminate results in international fora.

The software component is being handled by both the Dutch and the Bhutanese.

To date the project has completed the following steps:

- ◆ the project initiation workshop;
- ◆ ex-ante assessment of GHG emissions in the project area and socio-economic situation and development relevance of the micro hydel; and development of a project baseline.

The Bhutanese participants to the workshop attributed many positive aspects to AIJ and considered it a priority to start gaining experience with AIJ projects. The participants mainly gave priority to AIJ projects in micro hydropower and energy efficient appliances.

The field assessment addressed the climate change impact of the project and development impact in terms of well-fare and well-being. In this the "objective" actual situation is covered as well as local people's perceived priorities, ideas and impressions. The field assessment also gauged the local people's perception of climate change issues.

The methodology comprised of using questionnaires and using techniques based from Rapid Rural Appraisal, Participatory Rural Appraisal, Participatory Demand Assessment methodologies, e.g. Brainstorming, voting, historical calendar, seasonal calendar, village mapping, power relations mapping, wealth ranking etc..

The main development priorities of the local population are drinking water, irrigation, road and electricity. The women stressed the importance of drinking water, while the men stressed roads and the younger people were more concerned with keeping wild animals off their fields.

GREENHOUSE GAS EMISSIONS

The GHG emissions balance in the project area was mainly dominated by methane emissions, mainly from agricultural practices and burning of biomass fuels.

The main energy sources of GHG emissions are combustion of kerosene for lighting, diesel for milling and fuelwood for cooking, water heating, etc.. With respect to the latter, there appears to be no fuelwood related deforestation, and hence the main climate change effect is from methane production during combustion.

With the current situation, the project is likely to influence only kerosene, diesel and dry cell consumption. The related-mitigation potential is very small at approximately 12 tonne CO₂ equivalent.

If a component of electric water heating/cooking were added to the project, a larger mitigation potential of 0.2 kilo-tonne CO₂ equivalent would be present in the energy sector.

For improving the emission analyses of this study, it is recommended that:

- ◆ the emission factors are refined notably for agricultural sources;
- ◆ satellite images are used to study land-use changes;
- ◆ identify GHG emissions associated with the dry cell production;
- ◆ pinpoint district forest fires on sub-regional or village level.

GENERAL FINDINGS FROM THE AIJ PROJECT

The AIJ project is likely to have a significant development impact and only a minor climate change impact. This underlines the importance for the criterion "development relevance" in the AIJ pilot phase. The development and practical application of the AIJ monitoring methodology has already yielded a significant number of valuable experiences and insights, together with a useful practical method for field assessments. Although in terms of GHG abatement the present project is not very cost-effective, it still corresponds well with the project objectives under the AIJ pilot phase.

One of the interesting findings of this study was the dominating role of GHG emissions from agricultural practices. If additional economic development did take place with the fulfillment of the development priorities of the local community (notably the feeder road), this might lead to increases in agricultural production, leading to growing instead of diminishing GHG emissions. On the other hand, looking for mitigation options in the agricultural sector would be very sensitive and difficult as that would have a very direct link to the basis for the livelihood of the local population.

CONCLUSION

Bhutan's success in furthering the cooperation with the government of Netherlands has really been a result of:

- ◆ dedicated leadership to environmental issues/ political will;
- ◆ the willingness of the Government of Bhutan to start building up institutional capacity on environmental issues;
- ◆ the willingness to chart out a development path that aims to integrate environmental issues with development; and
- ◆ the intact natural resource base of the country.

The AIJ project implementation has led the Government of Bhutan to recognize the importance of ensuring that any AIJ project in the country must meet basic social and economic development needs. However, one of the difficulties in the Kilung Chuu project was that meeting the development requirements of the people would lead to increasing GHG emissions. However, the project recognized that if simple technologies like water heating and electrical cooking devices were introduced, this would lead to greater reduction of GHG emissions.

Some of the key lessons learnt from this AIJ project for Bhutan were:

- ◆ the importance of negotiating power;
- ◆ the realization that AIJ projects must meet basic development needs of the local people;
- ◆ AIJ projects must be in line with national development policies;
- ◆ technology transfer must take place; and
- ◆ AIJ projects must bring an increase in resources from the North to the South.

The AIJ project implementation has also led to the increased institutional capability with relation to climate change and global environmental issues. Regular training of key sectoral officials and workshops with local people have taken place with relation to climate change issues. There is also high-level interest in starting the mechanisms for a carbon fund. The National Environment Commission will also begin an exercise to start simulating carbon credit negotiations.

The implementation of the AIJ project with the government of Netherlands and the implementation of innovative sustainable development projects is allowing Bhutan the

opportunity to build up institutional capacity to pursue a sustainable path of development. The exercise in the AIJ could also be potentially valuable for Netherlands, as Bhutanese forests could offset Dutch carbon emissions. With the per capita emissions of Bhutan at -19.6 tonne, and the Dutch per capita emissions at 14.3 tonnes, there is scope for future AIJ cooperation. Therefore, bilateral sustainable development agreements could provide valuable means for other developing countries to implement environmentally sound development with positive benefits accrued to both partners.

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Ministerio de Desarrollo Sostenible y Planificación

BOLIVIA

La Paz, febrero 4, 1999
MDSP - VMARNDF No. 197/99

Señor
Joop Pattisina
Ministerio de Vivienda, Planificación Espacial y Medio Ambiente
Reino de los Países Bajos
Fax: +31 70 3391310/11/12

De mi consideración :

Con mucho agrado he recibido su invitación a nombre del Ministro de Vivienda, Planificación Espacial y Medio Ambiente de los Países Bajos, referida a realizar una contribución a la Revisión de los Países Bajos sobre la experiencia del Programa Holandés de Actividades Implementadas Conjuntamente, que será presentado al Secretariado de la Convención Marco de las Naciones Unidas sobre el Cambio Climático (CMNUCC).

En este sentido, debo comunicarle que el Ministerio de Desarrollo Sostenible y Planificación, como autoridad nacional en esta temática, a través del Viceministro de Medio Ambiente, Recursos Naturales y Desarrollo Forestal (VMARNDF), ha venido realizando constantes esfuerzos para otorgar al mecanismo de Implementación Conjunta, definido por la I Conferencia de las Partes de la CMNUCC, un marco adecuado y facilitador para el desarrollo de iniciativas en este campo.

El desarrollo de estas actividades, está basado en los estudios técnicos que han sido elaborados por el Programa Nacional de Cambios Climáticos dependiente del VMARNDF, donde claramente se identifican las opciones probables y áreas prioritarias para el país dentro del sector energético y el no-energético, para las cuales se podrían implementar proyectos de mitigación y secuestro de emisiones de gases de efecto invernadero. Es así que, mediante Decreto Supremo el Gobierno de Bolivia en el presente año, crea el Programa Nacional de Implementación Conjunta, ente competente para la promoción y evaluación de proyectos enmarcados en las Actividades Implementadas Conjuntamente (AIC) y en los mecanismos de flexibilidad definidos en el Protocolo de Kyoto.

Con este espíritu de trabajo y demostrando un alto compromiso con los preceptos de la CMNUCC, ya el año 1997 el gobierno de Bolivia concreta el primer proyecto enmarcado en AIC referido a electrificación rural con paneles fotovoltaicos. De esta misma manera, la concreción de dos proyectos enmarcados en AIC para el sector energético, con la cooperación del Gobierno de los Países Bajos, es fruto de un trabajo dedicado, que se origina con las inquietudes del sector privado de generación y distribución eléctrica de nuestro país para alcanzar nuevas metas de desarrollo y el decidido apoyo de la Representación de la Embajada de los Países Bajos en Bolivia que ha logrado identificar los socios más adecuados para implementar tales iniciativas.

El proceso, que culmina en Septiembre de 1998 con la firma de dos Memorandum de Entendimiento entre los Gobiernos de Bolivia y de los Países Bajos para presentar estos dos proyectos como Actividades Implementadas Conjuntamente ante la CMNUCC, ha estado sujeto a varias etapas de análisis técnicos e intercambio de información entre las diferentes partes participantes, asegurando que cada uno de estos proyectos coincide con las metas nacionales de desarrollo y tendrán un impacto positivo económico y social para el país, contribuyendo además a alcanzar el objetivo último de la CMNUCC.

Por otra parte, considero que el proceso de negociación de los certificados que cuantifican la cantidad reducida de emisiones de gases de efecto invernadero ha sido desarrollado en un ambiente favorable y de manera transparente, lo que ha permitido acordar una distribución equitativa para ambas partes de los mismos, lo que sin duda permite considerar a estas iniciativas como una sólida contribución al desarrollo adicional y a la toma de decisiones de la Conferencia de las Partes sobre los mecanismos de cooperación de las AIC y de los mecanismos de flexibilización del Protocolo de Kyoto a la luz del objetivo último de la CMNUCC.

Finalmente, considero que el trabajo conjunto en estos dos proyectos, entre las instituciones pertinentes de nuestros países, será fructífero y en espíritu de alta cooperación, en especial en los procesos de certificación del progreso y resultados finales de los mismos, los cuales serán informados al Secretariado de la CMNUCC y que este tipo de cooperación continúe fortaleciéndose en el futuro con el desarrollo de nuevas actividades en el marco de la CMNUCC.

Sin otro particular, a tiempo de saludarte reitero mis consideraciones más distinguidas.



Neisa Roca Hurtado
VICEMINISTRO DE MEDIO AMBIENTE,
RECURSOS NATURALES Y
DESARROLLO FORESTAL
Min. Desarrollo Sostenible y Planificación

OPR/JHF/jhf
cc.: Embajada de los Países Bajos
cc: Arch.



TO:

Ministry of H,SP & Environment
 Directorate Air & Energy, Climate Change Department
 Fax No: +31 70 339 13 10

Mr. Erwin Mulders

FROM:

Ministry of Environment & Water
 Air Protection Department

Mr. Teodor Ivanov

Phone: + 359 2 83 851 ext 511 Fax: + 359 2 680 39 26

RE: Bulgaria's opinion and experiences on AIJ/JI

Dear Mr. Erwin Mulders,

Thank You for the fax, dated 25 Jan. 1999.

According to your request, forward I try to express our opinion on AIJ/JI and to share our observations on implementation of an AIJ-project named "Demonstration zone for energy efficiency Gabrovo"

We expect AIJ-projects to provide experience to the government, stockholders and factory owners, however to inspire confidence in the economical, technical and environmental benefits from the JI-projects.

Also, the lessons learned with AIJ showed us following preferable criteria with regard to JI-projects implementation :

- The investments from donors used for JI-projects should be provided mainly as grants not loans. If the host country has to paid back investment amount in full, the benefits from the JI-projects will be decrease significantly.
- The JI-projects should be accepted only under the condition that they provide additionally to "business as usual" projects, in other words the projects should not be accepted as JI if they are commercially feasible. Such projects that lead to a reduction in GHG emissions has to be supported by national strategy (Action plan) on reduction of the GHG emissions.
- If there is national legislation requiring that certain measures be undertaken by government that lead to reduction of GHG emissions, measures taken to implement those measures should not be considered for implementation of JI-projects.
- It is desirable that environmental impact assessment for all JI-projects to be carried out including public consultation. EIA would be assure that certain project is in compliance with JI criteria and is it public acceptable.
- There should not replacement of existing foreign aid programmes by JI- projects. There is risk that the existing foreign assistance incentives, for instance energy efficiency programmes etc. could converted to JI. This not lead to increase in investments on GHG reduction.
- In order technical and management experience on implementation of projects to be transmitted in host country, the donor country has try to find a way that local firms and experts in JI-projects to be involved.
- The establishment of a baseline of projects requires a complete and reliable GHG inventory of the host country as of given point in calculation of effects. To

determine the net GHG reduction of each proposed *JI*-project, has to be well known how much GHG emission could be emitted without the *JI* project.

- We think that rights and obligations established in an economic agreement between an investing and a host country should always be for a limited period (no more of 10 years), and has to be reviewed at regular intervals. In countries which economic in transition where economic and political conditions are changing so far often, if there is a large number of *JI*-projects which long term credits approved, this could constrain future governments which could then have problems in fulfilling their emission reduction obligations.
- Credits should be approved on an annual basis and their amount should be based on the actual emissions reduction by the project achieved. Only after formal approval by the *JI* authority in the investing and host country, could credits be transferred from one country to another.

Observations on implementation of an *AIJ*-project named "Demonstration zone for energy efficiency - Gabrovo". (These information has been prepared by implementation agency of project - Centre EnEfekt).

There is a good potential for *AIJ/JI* projects in energy efficiency and energy conservation in Bulgaria.

Low costs per avoided tonne CO₂ can be achieved in Bulgaria

For example:

- District heating energy efficiency project for Gabrovo 10 \$/t CO₂;
- Street lighting energy efficiency project for Gabrovo 14 \$/t CO₂;
- School buildings energy efficiency retrofit project for Gabrovo 10 \$/t CO₂

(Calculations are based on all project costs, not only on the governmental support, which means that costs per tonne CO₂ will be much less.)

***AIJ/JI* projects provide good incentives for Bulgarian participants:**

- a possibility for foreign investments in conditions of budget and financial shortages;
- technology improvements.

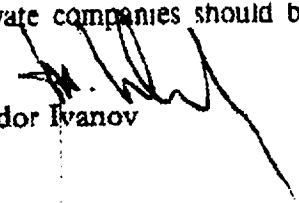
There are no environmental incentives for Bulgarian participants for now, except avoidance of environmental charges if any.

Barriers to be overcome in Bulgaria

1. The problems with baseline identification and identification of emissions reduction should be appropriately solved. The rules should be clear and should provide reliable comparable results.
2. Proposals for *AIJ/JI* projects are now developed on national level with the participation of different governmental institutions. Proposals coming from companies are limited in number. Such proposals can be developed mainly on the basis of already established contacts between companies from both countries. There are limited possibilities for companies and non-governmental organisations for receiving information and know-how about project and application development. Decentralization approach, information dissemination mechanism and transparent procedures are needed.
3. There is no JI infrastructure: registration and coordination institution, rules, certification for *JI* project development, guidelines, models, incentives.
4. There should be incentives and clear procedure for local/municipal initiatives for *AIJ/JI* projects. Local authorities show high interest in energy efficiency projects and in new financial and investment mechanisms for their implementation. Public-private partnerships between local authorities and private companies should be supported.

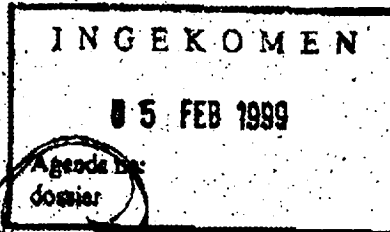
27.01.1999

Yours sincerely


Teodor Ivanov

Czech Republic

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FAX TRANSMISSION

To: Royal Netherlands Embassy
Gotthardska 6/27
225 40 Praha 6 - Bubeneč

Date: February 5, 1999

→ AR

Attention: Mr. J.L. Westhoff
Counsellor for Economic and Environmental Affairs

Fax: 24 31 21 60

From: Ing. Alexandra Orliková, CSc.
Director of the Department

No. of pages: 1

Subject: „The Dutch evaluation of the Activities Implemented Jointly“

Dear Mr. Westhoff,

referring to your fax message of 03/02/99 I am pleased to send you a comments of the Czech side which could be included in the Netherlands review.

The Czech Republic, as a host country of the AII FACE Project can confirm that its experience from the co-operation with the Netherlands bodies involved in the AII FACE Project is fully satisfactory. The AII FACE Project serves as an outstanding example of properly managed and implemented project. Its implementation particularly contributes to the recovery of forestry in the Křkonoše and Šumava National Parks.

Yours sincerely

for
Alexandra Orliková *Flank*

LATVIA

From: Ingrida Apene ("C=NL;A=400NET;P=400SMTP;DDA.RFC-822=erna(a)novell.varam.gov.lv")
To: VROM.DGM-DLE(PATTISINA JJM)
Date: Tuesday 2 februari 1999 15.35
Subject: Review report on AIJ

Dear Mr Pattisina,

Thank you for emails sent on 21 and January 1999. I just returned from Geneva.

The Netherlands successfully started pilot projects in Latvia. In 1998 the government of Latvia approved them as projects of Activities Implemented Jointly. Unfortunately Uniform Reporting Format on AIJ under the Pilot Phase was not filled in completely because experts could not reach common opinion on baseline scenarios and activity scenarios for AIJ projects, as well as amount of reduced and projected reduction of GHG emissions. The main reason is that Latvia is undergoing the process of transition to a market economy. It means that our experts for calculations can not use business-as-usual scenarios but they have to elaborate specific scenarios. The state budget is so limited that the government of Latvia is not able to finance investigations for projectsline and activity scenarios.

Evaluation and expertise for two pilot phase projects in Latvia: small scale cogeneration plants in Adazi and Lielvarde is specific. Difficulties are connected with following factors:

1. Latvia is country with deficit of electricity and therefore imports electrical energy from different countries: biggest imported part is going from nuclear power plant in Lithuania (without CO2 emission); some electricity amount is purchased in Estonia from cogeneration plant fuelled by shaloi; some - in Russia. Yearly amount various from water level in Daugava river and energy produced in hydro power plants in Latvia. It means that basic scenario is variable.
2. Cogeneration units are working for district heating system. There are different approaches to calculate reduction of CO2 emissions. We would like to be introduced with them and to discuss which methodology could be used for Latvian case.

We had negotiations with ECODOMA in Latvia and EDON, the Joint-Implementation registration Centre, Institute for Environmental Studies Vrije Universiteit Amsterdam and the Ministry of Housing, Spatial Planning and Environment in the Netherlands about investigation this problem too. Unfortunately our co-operation with TWENTE and Institute for Environmental Studies Vrije Universiteit Amsterdam on basis of agreement was cancelled. Therefore we have to find other way how to find support in solving of our methodological problems.

Recommendations:

1. By Netherlands support to carry out common Latvian-Dutch study how to solve some methodological problems such as uncertainty regarding reference and activity scenarios and leakage effects for different JI project types in Latvia. Such study will be helpful for estimation of GHG emission reduction for JI projects in Baltic States and some other countries in transition, and for emission trading in future.
2. It would be useful to simplify reporting format for small scale projects keeping the same reporting format for large scale JI projects.

Yours sincerely,
Ingrida Apene

POLAND

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Our ref. NF/DWZ/S-JU/517/99
Total number of pages: 6

Warsaw, February 4th, 1999

From: SECRETARIAT - JI
Mrs. Jolanta GALON-KOZAKIEWICZ, Ph.D.
Mr. Maciej WOJCIECHOWSKI, M.Sc.

To: Mr. Joop Pattinson

Subject: POLAND - NETHERLANDS AIJ PROJECTS - OPINIONS AND
RECOMENDATIONS ON THE EXPERIENCE IN THE FIELD OF AIJ
PROJECTS - DRAFT

Introduction

Ji activities would encourage greater efficiency and environmentally sound practices in energy utilisation. In particular, Ji activities would foster ongoing reduction in local and transboundary air pollution and promote restructuring and modernisation of energy-consuming branches of industry.

Poland's energy economy is dominated by coal, which is domestically produced. The related greenhouse gas emissions and air pollution problems are huge. Coal for space heating is used both in district heating systems (heating several apartments) and in individual heating in stoves. There are some obstacles to conversions from coal to gas (among others, they include lack of access to financing and budgetary procedures of publicly owned heating companies) that could be diminished or liquidated by Ji projects.

Based on our analysis of the projects according to our primary evaluation criteria (cited below), we have determined that the Poland - Netherlands projects are an excellent example of what the Aji projects can achieve.

Evaluation of Ji projects in Poland

- Ensure that Ji projects comply with the standards adopted by the Convention of Parties.
- Ensure that Ji projects are consistent with the National Environmental Policy of Poland, promote the principles of sustainable economic development with optimisation of natural resource allocation, and are beneficial in the long term to Poland.
- Ensure that public and private financial resources devoted to implementation of the Ji project are used cost-effectively.

Country seeks energy security through stable energy deliveries at socially acceptable prices and with minimal damage to the environment. Among the priority actions are to diversify the primary energy supplies and to comply with international environmental agreements to reduce air pollution and greenhouse gas emissions. The AIJ POLAND – NETHERLANDS are designed to be fully-integrated and consistent with the goals and development strategies of the environmental policy in Poland and obligation under UNFCCC.

CASE STUDY: BYCZYNA PROJECT

Full title of the project: „Reduction of atmospheric pollution through modernisation of heat supply system in the town of Byczyna”

Project partners: TNO: overall project management, support in energy efficiency, individual energy cost allocation/heating systems, knowledge transfer; Byczyna Town Council: responsibility for realisation of modernisation programme, exploitation of the system; WPEC Opole: inventory current situation; heat requirement study, system design; ATMOTERM®: monitoring, baseline, local project manager; REMEHA B.V.: support TNO: delivery, installation and servicing boilers, training.

Description of project

The project concerns the modernisation of heat supply system in the town of Byczyna located in the south-western part of Poland. The modernisation consists in application of modern gas-fired boilers instead of existing coal - and coke fired boilers. The power of boilers to be exchanged in Byczyna within the project amounts to 4.4 MW. Several additional activities like knowledge transfer on gas-fired boiler technology and energy efficiency are included in the project. The project started in 1998 and is divided into two stages. At first stage (realisation in 1998) 9 boiler houses were the subject of modernisation. At second stage (realisation in 1999) remaining 7 boiler houses will be modernised.

The baseline for the project environmental and technical reporting was the situation of 1997. The AIJ factor is understood as investment cost (only hardware) covered by Dutch government.

Lifetime of project is 15 years.

CASE STUDY: SZAMOTULY PROJECT

Full title of the project: „Sustainable heat and power for public networks in Poland - modernisation of heat supply system and boiler house in the municipality and town of Szamotuly” in Poznan region.

Project partners: EDON International BV: project manager, supplier of technology, engineering, financing; COGEN Ltd: Local project management, measurements and energy audits, engineering; ENERGETYKA POZNANSKA S.A.: human resources, buying electricity, financing, engineering; DHC/Municipality of Szamotuly: buying heat, human resources, land and buildings.

Description of project

The project concerns energy efficiency in heat production by fuel switching. Gasification of a boiler house and heat supply network were completed by October 1998. Remaining

cogeneration unit and necessary automatic equipment are expected from Netherlands side soon; Technical data: 2 boilers of 1120 kW thermal power, 1 cogeneration unit of 387 kW thermal power and 263 kW electrical power.

Activity starting date: 01-01-1998; Expected activity ending date: 31-12-1999.

The baseline for the project was the situation of 1996/1997.

The AIJ component is qualified as investment cost (only hardware) covered by Dutch government.

Lifetime of project is 15 years.

Experiences on using the Uniform Reporting Format

Secretariat JI, as the national focal point as well as the reporting agency in Poland, jointly with parties involved, ATMOTERM and ENERGETYKA POZNANSKA, in the preparation and implementation of projects is preparing URF report (Uniform Reporting Format).

The results of baseline study are incorporated (as an abstract) in URF report in section E.1. Methodology of baseline study (assumptions, emission factors, software used) was also presented within this section. The projected emission reductions for the activity were also estimated and included in section E.2. The following comments can be pointed on using the Uniform Reporting Format:

- The scope of section E.1 (project baseline) is not defined in details. The question arises how much information should be presented there. Should the abstract of baseline study include evaluation of the baseline for other environmental aspects (not the GHG emissions) and for technical state?
- The issue of other environmental aspects seems to be very interesting when considering emission reductions (section E.2 of URF report).

In the case of Byczyna project we presented these two additional subjects generally. Description of methodology, also contained the part concerning other environmental aspects (emission calculation of all non-GHG pollutants and dispersion modelling of dust/SO₂ using SOZAT software) as well as technical state (site review).

The reductions of non-GHG pollutants (dust, SO₂) are considerable and the environmental benefits at this side are very important. Dispersion modelling calculations show how the air quality in Byczyna will get better after the project completion.

In the case of Szamotuly project environmental benefits are: emission reduction of CO₂, SO₂ and NO_x; reduction of noise level. Social/cultural benefits are: better quality of heat and domestic hot water delivery, cleaner laundry, more aesthetic appearance of boiler house. Economic benefits are: business development and transfer of technology to the Joint-Venture Cogen.; establishing a business and institutional framework for implementation of similar boiler houses.

Proposals for evaluation of the AIJ Pilot Phase

The Pilot Phase of Joint Implementation is a good opportunity to gain experience at different fields.

The case of Byczyna project showed some important aspects of AIJ:

- selection of project realisation place and time
- setting the effective project team
- setting the realistic operational and financial plan
- collecting information when estimating the baseline
- tools for monitoring the progress of the project

The case of Szamotuly project showed:

- impotence of good co-ordination between several partners
- adequate timing for delivery of equipment
- securing financing and setting joint venture companies prior to opening the tender
- some problems arose: during technical discussions appeared that due to very bad condition of circulation system of district heating network there is a possibility that not all heat produced in a boiler house might be distributed to the customers, so it was decided to extend investment by modernising also circulation system (pumps and vessels for hot water accumulation) - H.2 of URF.

Communication on AIJ

a.) Working within Byczyna project team observes the importance of good communication. It concerns internal project communication between project parties as well as external communication.

The internal communication is realised by means of:

- personal visits and talks of parties representatives
- electronic mail messages
- internal project reporting
- talks and personal visits were/are especially valuable for the following issues:
 1. defining roles of particular parties within the project
 2. interpretation of contract clauses
 3. setting the operational plan
 4. monitoring the project progress

The external communication includes:

- public awareness campaigns on JI concept and the project itself (articles, radio and TV presentations are in progress, an issue of the leaflet is planned for 1999)
- seminars on AJI, energy efficiency (planned for spring/summer 1999 to be held in Byczyna)
- preparation of lecture materials for schools and information events for inhabitants of Byczyna (planned for 1999)
- reporting to supervising bodies

b.) Concerning Szamotuly project the communication was /is realised by means of:

- visits and meetings of parties involved
- evaluation mission of SENTER
- articles in local press
- local TV presentations
- permanently contact with Mayor of the town

- preparation of the brochure and internet home page, planned for 1999

Lessons learned in AIJ projects

The introduction of improved technologies would facilitate the country's efforts to pursue its environmental priorities and standards and to take full advantage of the macroeconomic conditions and other incentives that induce energy efficiency and conservation. The techniques once successfully demonstrated in Poland - Netherlands projects are replicable in the large number of coal-dependent units.

As with any new venture, there was a lot to be gained from the projects and there was a certain amount of risk involved. However, the benefit of taking this risk is that we learned from the experience. Some organisational and investment problems have given us cause to reflect on how to anticipate these problems and prevent them in the future. The pilot phase presents an important opportunity to experiment with different approaches to international bilateral and multi-lateral negotiations and implementation; so, it is crucial that we identify the respective strengths and drawbacks of these approaches.

As for organisational matters, the first lesson learned is the value of securing financial resources prior to starting the project.

Secondly, the negotiations involve many actors and agreements so, can be tedious and time-consuming; the amount of time invested in this process can be economised in the future by pursuing well established in advance procedures.

Finally, the time involved in implementing projects is crucial factor in evaluation of AIJ pilot phase.

General remarks concerning evaluation of the AIJ Pilot Phase

The Pilot Phase of Joint Implementation is a good opportunity to gain experience at different fields. The conducted projects showed some important aspects of Activities Implemented Jointly:

- Time invested in negotiations and finalising bilateral agreements between donor and host countries
- Well-established procedures especially valuable for the following issues:
 - A - interpretation of contract clauses
 - B - defining roles of particular parties within the project
- Preparation's cost of projects proposals (in general, potential, future beneficiaries are not able to cover the mentioned costs)
- Methodologies for setting the baseline and procedure for its approval
- Measurement of environmental benefits
- Sharing credits between donor and host countries, especially valuable for future work
- Monitoring the project progress
- Contribution to capacity building
- Publicity and public awareness campaigns on Joint Implementation concept and the project itself.

We think that good communications between parties involved in the projects as well as external communication are very important factors in good understanding and realistic evaluation of AIJ.

On one hand: - evaluation of pilot phase as an important tool in fulfilment of obligation under UNFCCC;

- evaluation of environmental benefits in general.

On other hand: - evaluating and / or recognising that parties involved in AIJ are better / well positioned than other parties to address the persisting challenges that face the future of JI and / or emissions trading;

- evaluating AIJ as a leverage to influence policy makers that JI is a crucial tool in realisation of positive environmental changes.

There is no doubt that each AIJ project can add its own experience so it would be very useful to organise some kind of training / conferences concerning particular aspects of AIJ project at Pilot Phase. Besides that, as a result of international effort, it seems useful and beneficial for future work the preparation of international JI guidelines based on Pilot Phase experience.

Santa Cruz, 4 February, 1999
GG/023/99

Honduras



Mr. Joop Pattisin
Netherlands Ministry of Housing,
Spatial Planning and Environment
Fax: 0031 70 3391310/11/12

Subject: information regarding AIJ projects.

Dear Mister Pattisin:

From your Embassy, we have recently received your inquire in the subject matters so we could not avoid to be overdue in responding to it.

Nevertheless, the agreement is so recent that activities have just started and there is no experience that we can transmit on to you that may be worthwhile. We shall be more than glad to share with you all our experience with the San Ramon project which is becoming active just now.

Truly yours,

Alan Durán Tarabillo
General Manager

Calle Honduras esq. Av. Busch
Teléfono 367777 - Fax 324936
Casilla N°1310
Santa Cruz, Bolivia

Norwegian experiences and lessons learned from Activities Implemented Jointly (AIJ) in the pilot phase

1. Background:

We refer to Decision 6/CP.4 and hereby submit our preliminary views on experience gained and lessons learned from the Norwegian programme on activities implemented jointly (AIJ) under the pilot phase. We hope that this can contribute to the review process of the pilot phase, and provide insight relevant to development of rules and guidelines for the project based Kyoto mechanisms under Article 6 (on Joint Implementation between Annex I Parties) and 12 (the Clean Development Mechanism) of the Kyoto Protocol.

The Norwegian AIJ-programme has been based on two complementary approaches: bilateral cooperation between Norway and host countries, and multilateral cooperation through the World Bank (WB) as an intermediary. Currently, Norway is involved in AIJ projects at various stages of implementation in the following countries: Mexico, Poland, Costa Rica, Burkina Faso, the Slovak Republic, India and the Peoples Republic of China. Another project is under development in Romania.

The submission also contains a report prepared by the World Bank, and we further refer to previous submissions related to AIJ both from Norway and the host countries of the AIJ projects in the programme. Project activities have been reported utilising the Uniform Reporting Format for AIJ (URF) under the pilot phase as adopted by the fifth session of the Subsidiary Body for Technological Advice (SBSTA). The programme will continue to produce reports, including on evaluation of the projects.

2. Experiences gained and lessons learned

Project selection

A main goal for the Norwegian AIJ programme has been to maximise learning for the various stakeholders involved. In addition to criteria and guidelines provided by Decision 5/CP.1, the Norwegian intergovernmental AIJ-committee has defined supplemental criteria for the selection of projects. When selecting projects under the program, the following elements have also been considered:

- To achieve a diverse project-mix, including fuel-switch, energy efficiency as well as reforestation projects.
- To achieve a wide participation of various Parties in the AIJ-programme.
- The cost of greenhouse gas (GHG) reduction. Priority has been given to projects with lower abatement costs than the Norwegian CO₂-tax on fuel oil, equal to about 20 USD per ton CO₂. Almost all selected projects have abatement costs below this level.
- The workability of the projects, especially inside the framework of the AIJ-programme.

Development of the criterion of environmental additionality from Decision 5/CP.1 para 1.d (that the projects "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") has been one of the practical challenges of the programme. Many projects, which mitigate greenhouse gas emission, are expected to have a short payback period, and they could thus be considered as commercially viable (implying that the mitigating activity would occur also in the absence of the AIJ-project).

Some projects considered for inclusion in the programme were rejected for this reason. Seen in retrospect, some of these projects have not yet been realised in the market. Thus, our experience shows that there are many barriers for project financing and implementation. These include lack of capital, access to or knowledge of relevant technologies, institutional barriers and other project risks. Such issues apply to countries with less developed market economies both in Eastern Europe and among the developing countries. The experience from the programme indicates that GHG abatement projects with a short payback period could still be considered additional if significant barriers can be documented, and if the projects are not likely to be financed on commercial terms.

It is also difficult to assess both *ex ante* and *ex post* what would have occurred in the absence of the AIJ-project. The practical ways to address this issue *ex ante* in the Norwegian AIJ-programme has varied depending on the project. In some cases, it has been dealt with by developing several baselines. The projects have been selected according to estimated effects relating to what experts at the technical level on both sides considered "most likely" of such baselines.

Consequently, there is a need for a flexible interpretation of the criteria of additionality in relation to a baseline, with regard to host countries with less developed market economies. Overall, there seems, however, to be a large, as yet untapped, source of climate relevant projects which could be implemented as cooperative projects between Parties to the Climate Convention and eventually the Kyoto Protocol.

For many of these projects, it seems possible to combine an interest to invest in additional climate gas emission reductions or sequestration effects with meeting local and national environmental and developmental objectives. Cooperation on projects in the energy and industrial sectors will generally contribute to local and regional environmental gains that come in addition to GHG abatements, and which are often of great interest to the host countries. Reduction in emissions of SO₂, NO_x and particles will, for example, improve the local air quality and provide positive health and welfare effects for the population. Several of the projects in the Norwegian AIJ-programme include such environmental side effects, though these effects have not carried weight in the selection process. Thus, the potential for mutually beneficial activities through equal partnerships seems considerable.

Project development

A stepwise selection process has proven helpful to reduce several types of uncertainties related to the projects for consideration. The different stages of the process can be described as identification, pre-feasibility and feasibility studies. Even with large uncertainties, a pre-feasibility study could be sufficient for improving proposals or rejecting projects by presenting a draft project-based baseline, environmental effects, potential barriers for implementing the project, and a plan for financing with a rough estimate of necessary "AIJ-contribution" from a donor country.

Preparing the AIJ-projects in the programme has been more time consuming than expected. A thorough preparation has still been necessary to develop good projects. Availability of projects already developed by the host country, sometimes in co-operation with international institutions, has, however, accelerated the process.

The AIJ-projects have led to transfer of financial resources and technology to the host countries. These aspects of AIJ are important because they have created incentives for both host institutions and investors to engage in voluntary activities that are of mutual interest to both parties.

In sum, participants, including authorities and consultants, have gained valuable experience in project identification and development. Several projects have been chosen and a number rejected for not meeting the criteria set. Norwegian authorities have also gained experience in development of formal agreements related to such project activities. These experiences could be utilised in developing rules, criteria and administrative routines for project based mechanisms under the Kyoto Protocol. Such experience could also contribute to reducing future transaction costs for such projects and make Norwegian authorities and consultants better prepared for utilising the Kyoto mechanisms.

Lack of incentives for private sector involvement

The Norwegian funding of AIJ projects has come mostly from the Government and only to a small extent, from private sector sources. This reflects that business and industry in a pilot phase without crediting seem to lack incentives for involvement in project based activities, as long as the main objective is limited to gaining experience with such co-operation.

For future projects, there is a need to strengthen the incentives for the private sector and further to pursue measures to lower transaction costs. In this regard, it should be noted that the transaction costs are likely to be reduced as a result of experience gained and as a result of a larger project portfolio.

Capacity and confidence building

It is important to stimulate capacity building before project implementation. It is also a prerequisite for successful co-operation that the consultants on both sides share the same understanding of the methodology and criteria that have to be met. Conferences and workshops have proved to be useful elements for preparing AIJ-co-operation. Such events are important for capacity building on both sides, and they provide a good opportunity to build confidence between countries. Several workshops and seminars have been held in co-operation with the World Bank. Norway has also co-sponsored several other international conferences. Capacity building at the national level will also be of great value for the future co-operation on project based activities under the Kyoto Protocol. Experiences from the pilot phase will be important as input to the further development of the Kyoto mechanisms. In the transition from AIJ under the pilot phase to fully operational Kyoto mechanisms with crediting it is important to keep the continuity with regard to capacity building and competence. This concerns both host and donor countries.

Focal Points and project units at the national level

Seen from a donor country, it has been a great advantage to co-operate with countries that have a clear focal point or unit at the national level to facilitate bilateral contacts. Unclear

responsibilities at the national level may lead to time consuming processes and thus discourage AII-co-operation.

Guidelines

In the programme, we have experienced that standardised procedures for identification and consideration of new projects has been helpful to ensure that all projects go through a similar evaluation prior to project selection. We believe that this has improved the quality of the projects.

Emission baselines have to be developed from many uncertain assumptions (energy prices, costs of technologies, etc.). It might therefore be useful to develop common guidance with regard to the assumptions chosen. The assumptions are of great importance for the estimated cost-effectiveness of the projects and thus for the emission reductions that are calculated. Clear guidelines will reduce the variation in choice of assumptions among projects with regard to baseline construction. It will make it easier to compare i.e. the cost-effectiveness of projects from different institutions, improve the credibility of the projects and reduce the possibility for differences in national approaches. Guidelines for verification will ensure that all projects go through the same test after implementation.

Ensuring long-lasting effect

To achieve long-lasting effects that are additional to a baseline scenario, demand side energy efficiency projects face some problems. The direct environmental gains could be reduced indirectly due to increased consumption of energy services such as light, heat etc. This increase in comfort is often called the "rebound effect".

If there is no permanent shift in technology to ensure a significantly lower emissions development path there might be a risk for returning to the baseline (business as usual) emissions path when the project period is over. Projects based on irreversible fuel-switch combined with energy efficiency measures ensure long-lasting effects. This is one of the reasons why priorities within the programme have been given to projects involving fuel switch, supply side energy efficiency improvements and renewable energy.

Uniform Reporting Format (URF) for Activities Implemented Jointly (AIJ)

The Norwegian experiences with use of the Uniform Reporting Format (URF)

With reference to decision 6/CP.4, and the request for national experiences with the Uniform Reporting Format for AIJ-projects.

1. Background

Norway has since the beginning of the 1990s worked actively to identify possible abatement projects both through multilateral cooperation with the World Bank and on a bilateral level. Since COP 1 established a Pilot Phase for Activities Implemented Jointly (AIJ) in 1995, the Norwegian activities has been further developed and broadened. Norway currently has AIJ projects under implementation in the following countries: Mexico, Poland, Costa Rica, Burkina Faso, the Slovak Republic and India and the Peoples Republic of China. In addition, Norway and South Africa cooperates on a project on capacity building related to AIJ, which could be a basis for future cooperation under the Clean Development Mechanism.

Norway has applied the guidelines provided by the Conference of the Parties, (COP 1), decision 5/CP.1 as a fundament for the AIJ project selection and design. Norway in its reporting has also applied the Uniform Reporting Format for AIJ (URF) under the pilot phase (FCCC/1997/4) as adopted by the fifth session of the Subsidiary Body for Technological Advice (SBSTA).

2. General views on experience with URF

- The URF is overall a useful tool for reporting of ongoing AIJ-projects. The reporting activity is in itself a good exercise for the Parties to further collaborate on the project. We believe that Parties involved in a project achieve valuable experience by making a joint report.
- The URF allows the Parties to report on data collection, estimation of baselines and emission reductions. However, at present there are no clear guidelines with regard to calculation of baselines etc. As long as the guidelines for these elements are vague there will be a variety of interpretations and the value of the reporting will not be optimal.

3. Definitions that needs to be clarified

3.1. Calculation of baseline

The main criterion decided at COP 1 is that AIJ-projects must provide emission reductions that are additional to what would otherwise occur.

Concerning additionality, the URF is formulated in very general terms. The current set-up contains no guidelines on how to calculate a baseline.

Standards or guidelines are decisive for comparison of cost efficiency between different AIJ-projects. Therefore we believe that it is necessary to develop a clear set of criteria for evaluation of the economic aspects of AIJ-projects. 3. 5. Verification and control

Project calculations should be verified by suitable means to determine the reliability of the technology or methodology used for emission reductions. As long as concrete guidelines for providing of baseline still are lacking, verification is difficult.

The URF contains no questions on verification and third party control. We believe that there is a need to develop criteria on how to assess deviations from planned or actual emission reductions. To be able to do this, it is important that the URF is supplied with questions about management and technical conditions (responsibility, metering etc.). In order to obtain complete transparency and credibility, we believe there is a need for an independent mechanism to verify the emission reductions.

The fact that each Party is responsible for their calculation of baseline makes it necessary to leave the verification to a neutral and credible evaluation system.

4. National communications and inventories

Regarding National communications, it is required that the Parties report policies, measures and their effects. The current URF is related to the projects and is designed without a clear link to sector or national inventories.

By making the emission reductions from the AIJ-projects visible compared to the national inventories, the impact of both AIJ and JI/CDM will get more visible and achieve higher credibility. It should also be possible to visualise the effects of different projects on a sector level.



AIJ Program Status Report

The AIJ Program at the World Bank, initiated in April 1996 in collaboration with the Government of Norway, is reaching its maturity point in June 1999. At the outset, the AIJ team established a set of objectives to be accomplished by the end of a three year period. Following is a review of the results received thus far including the lessons learned while attempting to reach these goals.

Maximize learning about AIJ

The main objective of the World Bank AIJ Program is the maximisation of participation and the learning value of the AIJ Pilot Phase. An important mechanism for emphasising the learning value of the AIJ pilot phase is reporting the pilot projects to the UNFCCC Secretariat. The program has already reported four projects. Also, the AIJ team at the World Bank has published articles in relevant newsletters and journals. Documentation of the AIJ Program has been widely circulated via the many AGBM, SBI and SBSTA meetings in the past year. Members of the AIJ team frequently present the program to a variety of audiences.

Lessons learned

The fact that host country prepares and submits the reports for the projects to the UNFCCC is an important aspect of the Bank's AIJ Program. Due to a lack of capacity and experience, some complications did arise in the final weeks before the submission of these reports. This depicts a definite need for continued awareness raising and human and institutional capacity building within potential AIJ Host countries.

Promote the long-term objective of the Climate Change Convention

The ultimate objective of the UNFCCC is the stabilization of GHG concentrations in the atmosphere at a level that would prevent continued dangerous anthropogenic interference with the climate system. The Bank's AIJ Program intends to ensure that the efforts made by the program will substantiate AIJ's ability to provide a major contribution to achieving the objective of the Convention. In addition to the demonstrative effect of the AIJ pilot projects, the program has also prepared research on the potential for AIJ, CDM and JI. One study suggests that a moderate regime of JI would imply that the trade in carbon emissions permits could amount to US\$ 10 billion annually by the year 2020. Another study analyzes how effective incentive structures can be put in place for private sector involvement in AI and, in due time, JI. CDM has emerged with potential interests to developing countries particularly in the context of Certified Emissions Reductions (CER) units.

Lessons learned

Whereas the efforts taken thus far via the AIJ program and the research mentioned above illustrate both the short term and the long term requirements and potential for CDM and JI, a need exists to examine what the next steps are to create a market for carbon offsets and CER in a way that promotes the long-term objective of the Climate Change Convention.

Promote Bank client country development

The desired outcome of this objective is to ensure that developing countries perceive AIJ to be consistent with and favorable to their development objectives. To promote this objective, the AIJ program has instituted the practice of co-hosting workshops with the countries of the AIJ projects. These workshops promote the local and regional understanding of AIJ and the technologies of the particular project. Additionally, increased interest in the potential for AIJ, CDM and JI in developing countries has resulted in the initiation of a new program at the World Bank: the National Strategy

Studies Program. This program aims to finance host country driven national studies to determine the options available to that country, including the potential benefits of AIJ/CDM/JI.

Lessons learned

As expected, the ability to utilize regular Bank projects to provide the pipeline has had the effect of reducing risks and transaction costs. Additionally, the AIJ program has revealed that the initial risks and transaction costs for individual AIJ projects can be further reduced through the development of potential mechanisms such as a fund to pool investments and diversify risks. Also, the program has realized that poverty eradication in developing countries has clear priority and could be addressed by climate change mitigation efforts.

Explore solutions to the methodological issues

The practical experience of the AIJ pilot projects provides the opportunity to analyze the potential complications as a result of the lack of understanding of the various methodological issues. A research program has been established with the goals of developing an advanced methodological bases and guidelines for future Bank AIJ projects and to contribute to the ongoing international debate on AIJ/CDM/JI methodology and assure the consistency of the Bank's approach with emerging international standards.

Lessons learned

Particular methodological issues have arisen in the implementation of the current AIJ pilot projects. For one, the projects selected for the AIJ program thus far have revealed that the determination of the baseline on an individual project basis is much less complicated than initially anticipated. Additionally, the Mexico High Efficiency Lighting project has been interesting to monitor because it has illustrated that the baseline can change during the implementation of the project and the actualization of the GHG offsets. The parameters of each of the individual projects have constantly been changing from the initial analysis, providing an element of risk diversification. The project characteristics and changing baselines have resulted in a pilot of Certification and Verification work on the project. Also, the India and Burkina Faso projects have indicated the possibilities of undertaking work on projects validation.

Promote partnerships and private sector participation

Private sector participation in the AIJ pilot phase is important to enhance the learning value and the potential for AIJ and JI; therefore, the AIJ program aims to promote the AIJ program to the private sector as a unique business opportunity. Thus far, the program has entered into its second phase which implies participation in the AIJ program by the IFC, the private sector arm of the World Bank Group. Indeed, the core financing for an upcoming project in Barbados is from the IFC. Additionally, a project pipeline is being developed from the IFC to provide additional projects.

Lessons learned

Thus far, a lack of sufficient incentives has prevented strong private sector participation in the AIJ experience. Although some discussions have been held with the private sector, the need exists to re-emphasize efforts to increase private sector participation in the AIJ pilot phase.

Identify and select AIJ pilot projects

The initial goal of the AIJ program was to implement up to five pilot projects by the end of 1997. The program is well on its way to having attained that goal, with projects currently being implemented in Poland, Mexico, Burkina Faso and India. Additionally, interest from other countries in establishing a similar collaboration with the Bank suggests the potential for projects in addition to those funded by the current collaboration with the Government of Norway. To that end, a project pipeline of approximately 25 projects have been developed to meet these demands. Plans are underway to mobilize additional resources to support 1-2 projects under the CDM framework.

Lessons learned

An important lesson learned from the experiences thus far is the need for future projects to clearly identify the AIJ component of the project prior to approval of the project. Although two of the current AIJ projects were initiated prior to the establishment of the AIJ pilot phase and its criteria, difficulties

arose in reporting the status of the projects and their estimated greenhouse gas offsets. CDM projects would be identified from concept stage through implementation.

A very important aspect of the Bank's AIJ program has been to address the concern for regional diversification of the AIJ projects. Although the program currently has a project in Burkina Faso additional projects in Africa are important to increase the learning.

Initial Views of the Alliance of Small Island States (AOSIS)
on Activities implemented jointly (AIJ)

Inputs concerning Parties experience in using the AIJ uniform reporting format; and, views on the process and information and experience gained and lessons learned with activities implemented jointly under the pilot phase.

I. Introduction

The Alliance of Small Island States (AOSIS) welcomes this opportunity to present further comments on these very important issues. AOSIS participated actively in the discussion at the 4th Conference of the Parties (COP), and supported the concerns which were raised through the Chairmanship of the Group of 77 and China.

AOSIS has consistently held the view that the AIJ pilot phase must be allowed to gather enough experience before a final decision can be taken on the utility of AIJ. Although initially skeptical to the concept, AOSIS accepted the compromise contained in decision 5/CP.1 of the 1st COP. AOSIS was skeptical because many of the ideas which were being expressed about AIJ appeared to be an excuse for exporting Annex 1 commitments to developing countries.

Furthermore, AOSIS had presented views on the subject as early as the 9th session of the Intergovernmental Negotiating Committee (INC) for a Framework Convention on Climate Change (FCCC) (A/AC.237/Misc.33/Add.3), particularly in regards to monitoring and verification. AOSIS stated then that activities (then referred to as joint implementation) should be confined to those for which there is an agreed scientific, technical and economic basis for assessing all the related costs and benefits. It was also recognized that there was a need to ensure that financial resources flowing from these activities should be additional to existing official development assistance.

In addition, at the 11th session of the INC, AOSIS reiterated that JI/AIJ should apply exclusively to commitments on limitation of emissions from sources, and not to enhancement of sinks, that Parties shall communicate fully to the COP the outcomes of the activities, and that technology, resource and financial flows shall be new and additional to ODA.

It is significant that in proposing the arrangements for AIJ, it was hoped that projects would cover a wide range of sectors, notably in energy, transportation, household & industry and forestry. Moreover, these activities would be spread over a large number of countries providing the necessary geographical diversity. The latter is crucial in relation to the range of socio-economic conditions, business

cultural differences and the different technical/social challenges. However, the AIJ pilot phase has not turned out to the great expectations that were raised at the 1st Conference of the Parties.

Experience in using the uniform reporting format AOSIS is in favor of clarity and simplicity in the reporting format and procedures, while maintaining the necessary levels of detail required to evaluate the pilot phase. AOSIS accepted the agreed uniform reporting format on that basis.

AOSIS is not in a position to evaluate the experience of using the uniform reporting format, as few AIJ projects have been implemented in AOSIS Member States. The reporting on these projects has not been completed at the present time, and it will be difficult to adequately reflect the varied impressions emerging. The decision of the 4th COP to continue the pilot phase, and in particular to encourage projects in Least Developed Countries and Small Island Developing States, is welcomed, and may enable AOSIS to gain the necessary experience to fully answer this question. It is expected that one AIJ project in Belize will be reported on during the coming months, and that the details in this report will be of great value to all Parties, and to AOSIS Members in particular. Initial views have shown that this project reporting under the uniform reporting format is comprehensive, but it is edited to a degree that would make independent evaluation of the reports alone a very uncertain exercise.

It is apparent to AOSIS that there are some existing problems in relation to the utilization of the uniform reporting format. AOSIS is not able to state whether these problems relate to the uniform reporting format per se. The question remains whether there is any other motivation, or another agenda, that has caused the uniform reporting format to be applied in such a haphazard manner.

AOSIS is interested in fully evaluating the AIJ pilot phase, and to make an informed decision when the time comes. Current information available does not make such a decision possible, and this is largely due then to the failure of the Parties concerned to fully utilize the uniform reporting format. This problem may be caused by a lack of willingness to establish a national infrastructure in the host country for accepting AIJ projects, and then to continue with the responsibility for monitoring, verification and reporting.

AOSIS continues to be concerned over the lack of consistent, comparable information from the AIJ projects concerning baselines. This will become a major concern when the Clean Development Mechanism is operationalized. AOSIS considers that it is vitally important for the methodologies for the calculation of the baselines to be consistent across project types and countries, and that this issue is not addressed by simply adjusting the reports format. What is needed is a full and

independent critique of the efficacy of the pilot phase projects in terms of addressing the concerns raised by the Parties.

II. The AIJ pilot phase - experience gained and lessons learned

Few AOSIS Member States are able to discuss any experience gained, as there have only been a handful of AIJ projects in our countries. As stated above, the reporting on these projects has not been completed at the present time, and it will be difficult to adequately reflect the varied impressions emerging. One issue that has emerged is that the National Focal Points for FCCC activities must be kept informed by the proponents of an AIJ project. It is especially important for the Annex 1 Parties involved to ensure that the projects are developed in a transparent manner. The process of selecting AIJ projects to offer to developing countries has not been particularly open. This is also apparently the case for the description of a project (for example, is an AIJ project an energy conservation project using new technologies, or is it an energy efficiency project with more efficient use of existing technologies or products?). Some projects appear to have been inflated in their importance.

It is becoming evident that there are some important lessons to be learned, particularly in regards to problems that must be avoided in the operations of the Clean Development Mechanism (CDM) of the Kyoto Protocol. The AIJ pilot phase does not appear to have attracted the sort of projects which AOSIS suggested at INC-9, "those for which there is an agreed scientific, technical and economic basis for assessing all the related costs and benefits". Instead, it could be argued that the pilot phase has been side-tracked by too many sequestration activities. The good intentions that allowed decision 5/CP.1 to go ahead, may have been lost in the sink.

AOSIS continues to hold the view that the AIJ pilot phase should have covered all sectors, but with a concentration on sectors such as energy and transportation. It is clear that if anything can be salvaged from the AIJ pilot phase there needs to be a concerted effort to introduce new and innovative projects, that can fully demonstrate the possibilities for greenhouse gas emissions reductions, in particular in energy production and transportation efficiency improvements. AOSIS wishes to see a greater concentration of projects in the renewable energy sector (such as photo-voltaic, wind power, wave power and mini-hydro), for energy production as well as innovative projects in the transportation sector (such as fuel cells), and AOSIS will therefore not support any further sequestration projects for the AIJ pilot phase.

III. Towards a comprehensive review of the AIJ pilot phase

AOSIS is of the view that a comprehensive review of the pilot phase must occur in the near future. At the present stage AOSIS does not consider the available information to be adequate for that purpose. There has been too little experience with projects globally, and specifically there have been few projects in Small Island Developing States. The information reported to the Secretariat has not been very informative, which the Secretariat continues to politely understate. It may be the case that a lot of funding has been channeled into the pilot phase, but if the results that are presently available is all there is to discuss, then it would appear to have been money wasted. AOSIS does not consider the issue lightly, as there are tremendous potential problems that could be replicated in the CDM unless a cautious approach is taken with the AIJ pilot phase review.

It would behoove the proponents of the pilot phase projects to fully demonstrate to the Conference of the Parties that there is indeed merit to this particular mechanism. In particular, there is need to give priority attention to projects on adaptation or those having important implications for adaptation.

Nevertheless, AOSIS agrees that it is vitally important for the pilot phase to be continued and that deliberate efforts are made to raise awareness and build capacity. It is imperative then that there is transparency and consistency in the terminology, definitions, costs, the determination of baselines, monitoring, reporting as well as verification. The initial reports from the limited number of activities undertaken so far point to the need to improve accuracy, comparability of data, methodological, technical and institutional issues, and these tasks should be of highest priority to the proponents.

AOSIS would like to see a continued constructive debate which can capture valid points that have been raised by the AIJ pilot phase proponents, while bearing in mind the very real concerns that the most vulnerable countries have in relation to strong and effective action against climate change.

Swedish comments regarding experiences of the form used for reporting of AIJ projects.

The Swedish National Energy Administration wishes to point to three cases where Sweden would like to propose that the UNFCCC's Climate Secretariat should formulate clearer instructions on how to fill in the form:

- 1) Annex I A, Point 3 Activity. Questions relating to the time of the project's start-up and completion can be answered in various ways. For its part, the Swedish National Energy Administration has chosen to use the time of the signing of the loan agreement and the time when the project owner takes over the plant. An instruction from UNFCCC would help to bring about a unified interpretation of these matters.
- 2) Annex I A, Point 4 Cost. The method of calculating costs needs to be standardized. The costs involved in an investment can be covered via contributions and/or loans. A contribution from a financier can certainly be defined as a cost for the financier. However, a loan, mediated e.g. by the Swedish National Energy Administration, is not a cost in business economic terms if the interest rate and other loan terms are the standard market rate and terms. The amount becomes a cost for the lender only when the borrower cannot make the loan repayments. Due to the lack of clarity here, the Swedish National Energy Administration has hitherto chosen to report the loan amount as a so-called AIJ cost. Consultant costs and other transaction costs covered by the Swedish National Energy Administration are, strictly speaking, an AIJ cost and have also been reported as such. The AIJ cost reported affects the specific cost calculated for a decrease of one kilogram in the emissions of greenhouse gases. This figure also depends on the calculation period, i.e. from project start-up to completion, a matter covered in the point above. It also depends on the choice of baseline - see next point.
- 3) Annex I, Section E, Point 1 Project Baseline. The decrease in emissions of greenhouse gases is calculated in relation to the emission level that the project would have had if the investment had not been

made - i.e. the project's baseline. Some ten or so models are currently used to calculate the emission level which would have applied had the investment not been made. The results obtained from calculations in which these different methods are used may display considerable variation. Instructions from UNFCCC regarding the choice of model for different project categories would greatly facilitate both the calculations themselves and comparisons of various projects.

SWITZERLAND

INPUTS RELATED TO THE AIJ PILOT PHASE (Decision 6/CP.4)

1. Experience using the Uniform Reporting Format (paragraph 3)

Under the Swiss AIJ Pilot Program (SWAPP), all project proposals submitted for government approval under the AIJ pilot phase must include a completed URF. Thus government representatives responsible for AIJ project approval, consultants charged with preparing project proposals and, to a much more limited extent, the private sector have gained experience with using the URF since the SWAPP began its operations in early 1997. In addition, Swiss consultants have collaborated closely with experts in the Czech Republic, the Slovak Republic, the Russian Federation and Uzbekistan in their identification of possible AIJ pilot projects. This work also involved filling out the URF with data for the 65 projects identified through the respective National AIJ/JI/CDM Strategy Studies.

Generally the availability of a standard reporting format facilitates the transparency and comparability of individual submissions. Together with agreed common methodologies, an improved URF will be a key input into the design of standards against which Parties can verify consistency of reported project information with the established eligibility criteria for JI/CDM projects and accredited organisations can certify CDM projects under the Kyoto Protocol. Thus the revision of the URF can contribute to relevant elements of the Work programme for the Kyoto Mechanisms.

Based on the experience gained under the SWAPP, Switzerland wishes to suggest the following improvements to the URF and would like to invite the UNFCCC Secretariat to provide a revised draft URF for the consideration of Parties at the 10th Sessions of the Subsidiary Bodies:

*General Structure*Section A.4

It would be preferable to move this section so that it would follow the calculation of the project baseline and expected emissions from the AIJ project (Section E), since these data are required to calculate the CO₂ abatement cost that is called for. It might therefore make sense to integrate Section A.4 into Section F (and call it something like "Project cost and financing")

Sections D (Benefits derived from the AIJ project) and H.3 (Negative impacts/and or effects)

The URF would be easier to follow if these sections were merged into a single section on "Non-climate impacts/effects" that would cover both the positive and negative effects of projects on the environment, society/culture and the economy. The merged new section might logically follow the current section E or G. This would greatly facilitate the readers' orientation.

*Substantial comments*General comments

- All parameters should be expressed in SI units. This requirement should be indicated at the beginning of the format.

- The URF – through the structure of its input tables – should provide more guidance on the type of information desired. A brief set of guidelines or a handbook for filling out the URF would be helpful.
- Introduce a Box "date of last document modification" on front page.
- Parties should be encouraged to voluntarily provide information on projects that were assessed, but found to be ineligible under the international rules of the AJI pilot phase (either the completed URF or only a description of the project according to Section A.1/A.3 together with a brief explanation of why the project was rejected). This would aid the review process and contribute to the development of common methodologies for applying the AJI (and subsequently JI and CDM) criteria.

Section A

- A2: List of standard functions remains to be defined.
- A3: Provide guidance on the following issues:
 - Definition of "Activity starting/ending date": Do these terms refer to the construction time? the duration of the AJI cooperation? the technical lifetime of the project? or some other activity?
 - Stage of activity: It would be useful to provide more differentiated descriptors for the category "in progress" (e.g., feasibility study completed, under construction, in operation)
 - Definition of "Lifetime of activity": Does this mean the technical lifetime of the project or the duration of the AJI cooperation (this would correspond to "crediting time" under JI or CDM)? Perhaps it would be better to introduce the term "theoretical crediting time", which clearly refers to the AJI consideration of the project rather than the technical lifetime (a footnote might be required to repeat the stipulation under Decision 5/CP.1 that no credits shall accrue to any Party as a result of greenhouse gas emissions reduced or sequestered during the pilot phase from activities implemented jointly)
 - Add a new item to the table "Relevant reference documents": This would allow those Parties that wish to do so to provide references to further publicly information on the project (e.g., web sites, feasibility studies, annual/progress reports, etc.)
- A4: Costs
 - Introduce two items: "Cost of baseline project in US\$" (analogous to the structure in Sections E.1/E.2) and "Estimated emission reductions in tons of CO₂ equivalent" (which is derived from section E.2). Both of these figures are required to calculate the last item "US\$ per avoided ton of CO₂ equivalent".
 - Generally, provide maximum guidance on how to calculate project costs. For example, it would be helpful to rearrange cost calculation into a spreadsheet-type net present value (NPV) calculation stretching over the whole crediting time of the project, including investments / capital costs, operation & maintenance costs, AJI monitoring & reporting costs, as well as financial benefits (returns from product sales). Define the "AJI component" (incremental costs) as the difference in NPV between the activity and the baseline scenario.
 - Introduce a box, "Key assumptions", where important assumptions of the cost calculation (e.g., energy prices, discount rate, etc.) are stated explicitly and justified.
 - Introduce a section "Financial data" with additional info on the project (e.g. expected return on investment, internal rate of return)

Section B

Guidance on the information under B.1 that is required on "subsequent reports" (specifically, we do not really understand what it is expected under the heading titled "describe").

Section E

- In general, there needs to be more guidance on what should be included in the scenario descriptions. The URF should not only contain the summary tables for emissions data, but also tables to ensure proper reporting regarding the descriptions of the baseline and reference scenarios. The new tables could request specific information such as a general description of each scenario, including how it was derived; a technical description of each scenario; information on and a justification of key assumptions; and an explanation of how each project fulfills the criterion of environmental additionality.
- The new tables (or subsections) should definitely include an item on "Key assumptions", where important assumptions of the emissions scenarios (e.g. emission factors, discount rate for offsets, etc.) are stated explicitly and justified.
- Introduce a new section on "Greenhouse gas emissions leakage effects"

Section F

It would be informative, if the information on the source of funds were broken down according to a predefined list of project-related steps such as pre-feasibility (project identification) phase, feasibility assessment phase, implementation/construction phase (basic project financing (excluding the AIJ component), financing of the AIJ component), operational phase (AIJ monitoring, AIJ reporting).

2. Views on the review process (paragraph 5)

Please refer to our submission on this issue contained in document FCCC/CP/1998/MISC.7. This submission contains a detailed mandate for the review in the form of a draft decision.

3. Experience gained and lessons learned with AIJ under the pilot phase (paragraph 5)

Although we expect to have more opportunities to provide input on our experiences during the course of the review of the AIJ pilot phase, we would like to offer some preliminary observations at this time:

National AIJ programs and project approval procedures

It took Switzerland 6 months from the time that a decision was taken to participate in the pilot phase to establish the necessary institutions (Interministerial Committee for AIJ/JI, Swiss AIJ Pilot Program Secretariat) and initiate operations, and another 4 months to adopt program guidelines, including program objectives, activities and project eligibility criteria. It has also been our experience that cooperation with host countries that do not already have such national institutions is extremely difficult, since there are no clear lines of decision-making and project approval procedures are unclear. Parties intending to engage in the pilot phase should be aware of the resources required: Our experience including cooperation with several

central European countries suggests that at least one (preferably full-time) person is required to facilitate participation in the AIJ pilot phase and that this person must also be involved in the UNFCCC negotiating process or have adequate access to this information.

Application of eligibility criteria

This has been a learning-by-doing process for all countries under the pilot phase. It is clear from the last report on submissions using the URF that the COP eligibility criteria for AIJ are not interpreted/applied in a consistent manner. Thus it is critical that the review process catalogue the different interpretations used by different Parties and assess the differences among – and the advantages, disadvantages and implications of – the various approaches. The criterion of environmental additionality should be given particular attention. An independent evaluation of which projects meet this criterion using the different interpretations offered by Parties would be extremely helpful. In addition, a number of countries have proposed additional criteria, and their necessity/merits should be assessed in light of the modalities being designed for JI/CDM.

Project implementation

Few of the approved AIJ projects have been implemented due to a lack of incentives (above all, a lack of crediting, as well as a lack of reduction obligations for the private sector at the national level), in particular projects with private sector funding. This is an indication of how important it is for the success of the pilot phase that COP take a fundamental decision that AIJ projects – if they meet the criteria and are compatible with the modalities to be established for JI and CDM under the Kyoto Protocol – can be, *in principle*, eligible under JI or the CDM, of course, *without retroactive credit* prior to approval under these mechanisms. Without such a signal, it is unlikely that the number of projects actually financed and implemented – and thus the number of countries involved in and gaining experience with AIJ projects – will increase enough to allow all countries that have expressed an interest in hosting AIJ projects to actively participate in the pilot phase prior to the launch of the CDM in 2000.

To date, there has been little information available on approaches to monitor, verify or certify AIJ project performance. The review should seek additional inputs on the guidance that Parties have given on these steps and in co-operation with private sector accreditation and certification bodies make recommendations for standards, as appropriate.

Capacity building needs and experiences

As mentioned above, Parties that choose to engage in the pilot phase cannot play an active role until they have developed their own strategies and allocated the necessary human and financial resources to do so. Thus there is an urgent need to support such activities in interested AIJ host countries. In September 1997, Switzerland and the World Bank launched a Collaborative Initiative to provide support for National AIJ/JI/CDM Strategy Studies in potential host countries (to date, Switzerland has provided a total of US\$ 2.43 mio; additional support has come from Finland, Austria, the World Bank and the study countries themselves). We would like to recommend that Parties take note of a recent study conducted to synthesise the results of the initial studies performed by teams from the Czech Republic, the Slovak Republic, the Russian Federation and Uzbekistan – together with international consultants and under the advice of the World Bank: The *Synthesis Study of the National Strategy Studies Program* provides a number of insights into the institutions required for countries to be active in the AIJ pilot phase and assesses current gaps in know-how and technical

expertise. The report is available free of charge from the World Bank (pkalas@worldbank.org).

Switzerland has also supported the efforts of various NGOs and governments. We recommend that the review develop an overview of past and ongoing capacity building initiatives related to AIJ/JV/CDM and identify the remaining capacity building needs on a short-term basis.

Submission of the United States on the Review of the
Activities Implemented Jointly (AIJ) Pilot Phase
February 12, 1999

U.S. VIEWS ON THE AIJ PILOT PHASE

The Activities Implemented Jointly pilot phase has provided the international community with an empirical basis on which to elaborate the project-level flexibility mechanisms included in the Kyoto Protocol. Project-based activities should be conducted so as to be credible, efficient, transparent and verifiable.

To date, the U.S. government, through its Initiative on Joint Implementation (USIJI), has accepted 32 projects that offer innovative approaches to combat the threat of climate change and promote sustainable development. These projects, 18 of which are in various stages of implementation, take place in 14 countries on four continents (Africa, Asia Europe, and Latin America) and are designed to apply a variety of technologies and practices, including: wind, geothermal, hydroelectric, and solar; coal to natural gas fuel switching; methane gas capture; biomass waste-to-energy generation; energy efficiency improvements to district heating systems and private residences; forest conservation; and reforestation and sustainable land management. There are a number of areas where experience gained during the AIJ pilot phase can be applied usefully in the design and operation of project-based mechanisms in the Kyoto Protocol.

Key Findings

- In the absence of credits, the private sector has been reluctant to participate in AIJ, thus hampering the development of important environmentally sound projects and the diffusion of new technologies;
- Transaction costs must be minimized. Project evaluation and review should be as expedient and transparent as possible;
- Standard guidelines in estimating greenhouse gas benefits would lower transaction costs, ensure objectivity and facilitate verification. The use of benchmarks might be useful in this regard;
- A separate process may be useful for individual assessment of promising projects that do not readily meet standardized guidelines;
- AIJ has demonstrated that projects can successfully target both sources of greenhouse gases and sinks;
- Adequate host country institutional capacity and clear lines of authority are crucial to enabling project development and approval; and
- A conclusive decision on the AIJ pilot phase at COP-5 is possible and advisable.

Design and Operation Issues

Program Objectives

Since its creation in 1993, as part of President Clinton's Climate Change Action Plan, the USJI program's primary goal has been to gain experience and knowledge that can be used as a basis for post-pilot phase programs. It has also:

- served as a mechanism for investments by U.S. entities in projects to reduce, avoid or sequester greenhouse gas emissions worldwide;
- promoted a wide range of projects to test and evaluate methodologies for measuring, tracking, and verifying costs and benefits; and
- encouraged technology development and dissemination consistent with sustainable development priorities in developing countries and countries with economies in transition.

Criteria were adopted to identify those projects that support the development objectives of the host country while providing greenhouse gas benefits beyond those that would occur in the absence of the joint implementation activity. The criteria were formulated to ensure that projects accepted into USJI would produce real, measurable, and lasting net emissions reductions. The program has continued to evolve, as more is learned about project evaluation and implementation processes.

Evaluation Panel and USJI Secretariat

The role of the USJI Evaluation Panel is to consider project proposals for inclusion in the pilot program as well as provide general guidance to the USJI secretariat. The eight members from different U.S. government agencies (i.e., Departments of Agriculture, Commerce, Energy, Interior, State, and Treasury and the Environmental Protection Agency and the Agency for International Development) consider not only how each project meets the established criteria, but also how the project contributes to the pilot program. To gain trial experience from a wide variety of projects during the pilot phase, the Evaluation Panel has in some cases accepted projects that may not have made a strong showing on one criterion if they were considered strong in terms of other criteria. In doing so, the Panel has been able to test the criteria and encourage innovative approaches to mitigating greenhouse gas emissions.

Certification of greenhouse gas benefits estimated for the projects has been challenging. The USJI secretariat has not verified reported emissions, provided standard monitoring guidance, nor reviewed the monitoring plans for most projects. Limited progress in these areas can be attributed to the relatively small number of funded or fully implemented projects as well as the fact that standard methods for determining GHG benefits have not been sufficiently developed. Funding and implementation problems may be attributable to the lack of strong incentives to undertake projects in the absence of GHG credit. On the other hand, U.S. government agencies are pursuing research on standardizing methods for determining GHG benefits.

The current evaluation process involves three levels of technical review – the completeness check, technical screening and full review – prior to consideration by the Evaluation Panel. This three-tiered approach allows program resources to be targeted more effectively to those project proposals that are most likely to meet the evaluation criteria. It also allows USJI secretariat staff to provide project developers with information regarding technical deficiencies in their proposals early in the process so that they may improve their proposals and resubmit them for consideration in a later review cycle. After a proposal is examined to determine that adequate information has been provided, and if there are no gaps or technical issues requiring resolution, technical reviewers who may be drawn from government agencies, national laboratories, and private industry complete thorough written evaluations of the projects. These reviewers are required to sign non-disclosure forms and to confirm in writing that they have no conflicts of interest that might compromise standards of impartiality. Once they have completed their work, the reviewers for each project category meet to discuss and clarify comments. At this stage, project developers may receive another opportunity to rectify any deficiencies identified in the detailed review. Sufficiently sound proposals are submitted to the Evaluation Panel along with recommendations and summaries of the technical comments.

The USJI technical review and evaluation process has attracted some criticism. One assessment of the program that has been echoed elsewhere described the complex, and multi-layered process as overly bureaucratic and lacking in transparency. This may have been largely a product of confusion over application of the criteria designed to test a project's "additionality" (i.e., to help ensure that project benefits are in addition to what would otherwise have occurred). In designing the pilot program, the U.S. agencies involved wanted to ensure that the accepted projects would meet credible standards for environmental integrity. However, experience has shown that these criteria have been difficult to evaluate, and as a consequence, it has not been possible to apply the same standard of additionality to all projects under consideration because of their unique circumstances and available data associated with each project. Evaluating projects on a case-by-case basis may have resulted in some subjective, uneven and resource-intensive judgments. Technical reviewers sometimes interpreted the additionality criteria differently and arrived at different conclusions.

Despite these critiques of USJI's operations, the same assessments recognize the importance of USJI as a pilot initiative. This initiative was intentionally designed to learn from early experience. Program evaluations acknowledge that the review and evaluation process has evolved and matured, and become more transparent over time. In an effort to improve upon the working definition of additionality, project developers have increasingly been given more flexibility, and in some cases, the benefit of the doubt on additionality tests. Overall, the program has received high marks for laying the groundwork for future climate change mitigation project development by documenting its work through annual reports to the Climate Change Convention (FCCC) secretariat. USJI has also offered support to the private sector in the form of technical assistance, grants, workshops and training programs. The variety of projects has enhanced our "learning" experience, fulfilling our objectives in participating in the pilot program. The knowledge gained can now be applied to future programs.

Project Development

Since its inception, the USJI Program has facilitated two-party and multiple-party arrangements among project developers and host country governments. To establish these arrangements (usually in the form of contracts), the participants directly negotiate and agree on project design, cost sharing, the project implementation schedule, monitoring and verification procedures, and other project issues, including allocation of potential GHG credits. In this latter regard, while crediting is not permitted under AJJ, most projects are expected to provide GHG benefits well after the AJJ pilot phase concludes. As such, many project participants anticipate that their projects may be eligible for consideration under the Kyoto Protocol's project-based mechanisms.

If arrangements are satisfactory, the host government prepares a letter indicating host country acceptance of the project, which is included in project materials submitted to the USJI secretariat for consideration. Project arrangements negotiated under USJI have presented both opportunities and challenges to project participants, to host country governments and to the USJI secretariat. These arrangements have enabled investors to participate directly in project decision-making and development activities as well as project implementation. They have thus been able to design projects to address environmental and/or business interests (e.g., forest conservation and market exploration) beyond generating GHG benefits. Small investors, or investors less interested in directly participating in project negotiations and development activities, have joined with other participants to pool resources and to share project development responsibilities.

Negotiating these arrangements has created some challenges. For example, as part of the process of developing a project under the USJI, participants must establish a GHG emissions baseline or reference case from which project GHG benefits are measured. Because baseline estimates are developed on a project-by-project basis, calculation methods have varied, even among similar projects within the same country or region. These differences have pointed to the need for standard guidelines for estimating project GHG benefits. Transaction costs as a percent of total project costs have also tended to be higher for smaller projects. This is primarily because some transaction costs are relatively fixed (e.g., proposal preparation, responding to technical questions raised during the project evaluation process, travel costs, etc.) and are incurred by each project developer regardless of overall project costs. Despite these challenges, project investors have continued to develop and submit proposals of varying sizes to USJI. Just as GHG estimation experience should emerge from the AJJ pilot phase, so too should the transaction costs associated with project development tend to decrease.

The issue of transaction and other project costs has attracted considerable attention. Meeting the USJI criteria for additionality has often increased overhead costs for project developers. A number of investors did not budget for the additional consultation needs that arose in the project review and evaluation process, which caused administrative costs to grow substantially when initial deadlines were not met.

Crediting Issues

Under the pilot phase for AIJ, "credit" for GHG emissions that are reduced, avoided or sequestered is not granted. Experience in the USJI Program has shown that, in the absence of credits, potential project developers are less likely to initiate efforts to go through with projects or invest in accepted USJI projects. In general, this has greatly reduced the ability of USJI projects to attract investment and, ultimately, to generate GHG emission benefits. Still, several USJI project developers have established credit-sharing arrangements in anticipation of future crediting. In one case study where project developers allocated "credits" at the outset, they were unable to secure insurance despite a relatively small financial risk because the "credits" had no financial value. In another example, credits could have helped to generate demand for the firm's product — an innovative, GHG recovery technology.

Another assessment of USJI cited the lack of credit as one of the program's biggest problems. The assessment noted that many companies held that the costs of participation outweighed the expected return. Several firms have chosen to take a wait-and-see approach to avoid risks during the pilot phase and to allow the evaluation process to mature. The assessment noted, however, that companies have benefited from the public relations value of their projects even in the absence of GHG credits. This unavailability of credit and the income that it could generate have magnified the effect of relatively high transaction costs.

Measuring, Monitoring, Verification Issues

Additionality

The USJI experience has provided useful insight into the concept of "additionality" as defined in Decision 5/CP.1 ("AIJ 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"). Additionality is critical to determining whether commitments to achieve net emissions reductions (through actual reductions, avoidance or sequestration) have been met specifically through the implementation of USJI projects. For the 32 projects in the USJI portfolio, the determination of additionality has involved the analysis of past and current trends that are extremely complex and difficult to identify and document. As a result, the methods used for assessing the different components of additionality have varied somewhat across projects, and ultimate judgments regarding the additionality of projects have required careful evaluation of project-specific factors. This experience suggests that a two-tiered analysis, with general standardized additionality criteria and a separate process for specific assessments of individual promising projects that do not readily meet the standard guidelines, may ultimately be needed.

USJI criteria have been structured to test three kinds of additionality — emissions, programmatic and financial. Emissions additionality can be relatively straightforward to determine. If a credible reference scenario can be determined, the numbers provided by the project developer can be reviewed to ascertain whether the greenhouse gas benefits associated with the project are additional to what would have occurred otherwise. Determining programmatic additionality involves deciding whether the project was initiated as a result of, or in reasonable

anticipation of, USJI. This criterion was intended to discourage the repackaging of planned activities that would otherwise have been undertaken. Therefore, project developers have had to demonstrate that, given prevailing regulations, policies, technologies, practices, and trends, their projects would not have been introduced in the absence of USJI. In practice, it has been difficult for some developers to document clearly their case, and careful consideration has been made in cases where projects were a continuation, extension, or component of an existing program or if the project proposal was formulated before the creation of USJI. The need to make subjective judgments argues for eliminating programmatic additionality in future regimes. Determination of financial additionality has been complicated at times. Although the USJI criteria established guidance on the use of overseas development assistance (ODA) and funds from the Global Environment Facility, various USJI projects have involved a mix of funds which has made it difficult at times to evaluate whether the criteria had been met. We may thus also need to consider how this type of additionality should be addressed in future.

Baselines and Reference Cases

A critical element in determining emissions additionality is establishing a credible baseline scenario and emission projection both for the reference case and the project itself. USJI project criteria require that project developers provide sufficient data and methodological information to establish estimates of current and future GHG emissions in the absence of and as a result of project activities. This process has often proved challenging. In order to establish credible reference and project scenarios, project developers must identify the factors likely to influence emissions and sequestration under both scenarios, and predict how these factors will evolve over time. The USJI program has not mandated the approaches that must be taken and therefore different strategies are currently being used, even by projects with similar activities in the same sector. As a consequence, it is difficult to compare the effectiveness of the various approaches. There are also several variables that can influence the calculations including selecting the project lifetime and boundaries, and assessing external factors. Some of the challenges to developing scenarios include the lack of standard guidelines for project-based GHG accounting, the frequent lack of site-specific data, and the uncertainties inherent in predicting the future course of activities under the reference scenario.

From experience with the 32 projects, USJI has found the optimal life time to be from the project's starting date (i.e., when the project begins to accrue GHG benefits) and ending date (i.e., the date after which GHG benefits no longer accrue and no additional monitoring activities are conducted). In terms of project boundaries, developers have addressed the area of land impacted by project activities, the scope of activities included under the project and reference scenarios, and the greenhouse gases involved. For land-use projects, it has been useful to look at the entire geographic area where carbon stocks are affected by project activities (including the area(s) of land where reference activities such as deforestation are avoided) as well as factoring in any emissions from relevant energy consumption (e.g., in the case of a tree plantation project, energy is consumed to operate wood processing machinery). For energy projects, the scope of the activity has taken into account the power generation facility(ies), transmission systems, and end-users affected by the project as well as any offsets from tree planting efforts, for example. External factors are more difficult to assess because they occur outside the project boundary and are beyond

the control of the project developer. USJI has urged project developers to take as many of these factors (i.e., demand for wood or energy, new technologies, national policies, etc.) into account when determining both the reference case and project baseline scenario. However, once these have been determined and the project has been accepted, changes in the external factors should not influence GHG benefit calculations over the life of the project.

The U.S. government has already begun to develop guidelines to standardize methods used to calculate project GHG benefits. Under AJJ, emissions reductions are estimated by comparing performance to a counter-factual baseline that is established during the JI approval process. The counter-factual baseline seeks to estimate what would have occurred in the absence of the project. Estimating emissions in the absence of a particular project requires assumptions about many different factors. Most factors allow more than one reasonable assumption, each of which can drastically alter the baseline and thus the magnitude of project reductions. For example, an important assumption driving a project baseline for a hydroelectric project was the type of energy that the hydroelectric project would displace. The scenario assumed the project would initially displace 100% of the fossil fuel. The percentage of fossil fuel was assumed to decline to zero from 1998 to 2001 (in accordance with the country's announced national goal). An alternative scenario could have assumed a future fuel mix based upon factors such as resource mix, energy demand, fuel cost projections, and installed and planned capacity in the country. The latter assumption estimates that fossil fuels will continue to be used for electricity production well after 2001 and, therefore, the hydroelectric project would offset more greenhouse gas emissions. In this case, an alternative baseline would increase the emissions reductions claimed.

While standard methodologies are somewhat straightforward for estimating project emissions, estimating emissions that would occur absent the project activity is less direct and more subjective. Broad guidelines may help to limit the range of choices for such estimates but the types of choices made and other factors will vary among projects. Some sectors may be well suited for "benchmark" baselines. A benchmark would serve as a uniform baseline that is set for a defined set of projects. By eliminating the need for estimating emissions in the absence of the project activity, a benchmark will increase objectivity and reduce the overall transaction costs of an emissions reduction project.

Monitoring and Verification

The USJI project criteria require that project developers include provisions for monitoring and externally verifying project results. Because of the inherent complexities, many project developers have requested technical assistance from the USJI program. In the case of land use change and forestry projects, the monitoring plans can be complicated, involving the collection of a broad range of data necessary to track changes in on-site carbon stocks and GHG emissions as well as data pertaining to local land-use trends and socioeconomic factors. Data collection activities range from analyzing satellite imagery to conducting on-site biomass stock surveys, establishing permanent plots for periodic biomass sampling, and collecting information on socioeconomic indicators. In the case of energy projects, the monitoring plans typically include record keeping on national trends in energy supply, fossil fuel consumption and energy production.

The USJI projects accepted to date generally include procedures for internal verification of data generated by monitoring activities, and all project developers have agreed to submit the results of their projects for external verification upon request. We are currently conducting and sponsoring research on the important issues of monitoring and verification. The primary goal is to develop guidelines for the development of monitoring plans and verification methods, and to apply them to existing projects. Although much work has been done in this area, there are not yet enough plans and methods developed to address the monitoring and verification needs of all types of projects.

Capacity Building

Institutional Capacity Building Workshops and National Offices

The USJI program performs a number of outreach activities. Outreach efforts are designed to provide technical support and to identify project opportunities and partners. They are also mechanisms to share general background and program information. In the last few years, USJI has sponsored both domestic and international workshops. The domestic workshops have focused on proposal preparation, and have educated attendees about the concept of joint implementation as a cost-effective element of a global strategy for addressing climate change and about the benefits of participating in the USJI program.

USJI has also co-sponsored regional institutional capacity building workshops in various parts of the world. They have encouraged policy development and the establishment of a technical base for designing solid projects that fit into national development priorities and are attractive to foreign investors. This ensures host country support for projects, reduces transaction costs, and increases the quality and quantity of project submissions. Some workshops have focused on institutional capacity building of a national JI framework and while others have emphasized technical aspects of project design. Technical workshops have been aimed at demonstrating different methodologies for quantifying carbon dioxide and other greenhouse gases in land-use and energy projects. Workshops have been held in locations such as Chile, Costa Rica, the Czech Republic, Kenya, Thailand, and the United Arab Emirates. These workshops have provided unique opportunities for regional government officials, representatives of the NGO community, and private-sector companies to engage in open and constructive dialogues on AIJ, the experience of the USJI program and other initiatives to date.

USJI has also sponsored workshops aimed at supporting human and institutional capacity building for joint implementation offices in select host countries around the world. Countries participating in the AIJ pilot phase have benefited from the establishment of a national AIJ program or office, helping to ensure that the FCCC requirement that countries officially approve AIJ projects and report annually on the accumulated experience is met. Host country programs also help to ensure the compatibility of projects with national sustainable development priorities and can help market specific types of projects internationally. Particular workshops have promoted multisectoral, inclusive and transparent approaches to the development of national AIJ programs with the capacity to evaluate and officially accept projects that are based upon countries'

economic, environmental, social and political development priorities. USJI has sponsored such workshops in host countries such as Guatemala, Bolivia, Indonesia, South Africa, Egypt, Chile, India, and the Russian Federation.

Institutional and Programmatic Capacity Needs in Host Countries

A meaningful lesson learned through the USJI experience is the importance of strong institutional capacity within host countries to ensure adequate host country participation in all phases of project development, implementation, and reporting. As one of its criteria, USJI asks that project developers provide a letter or other indication of host country acceptance of the project's inclusion in the USJI portfolio.

The complexity of the process for project review and approval, however, has varied considerably, both among host country governments and over time. The USJI experience has revealed that host countries with AIJ offices or other strong institutional arrangements that have clearly designated authority to evaluate project proposals are able to move more quickly and effectively. In many cases, establishing clear host country criteria for accepting AIJ projects has further facilitated the process of project review and approval. Once the project has been accepted, USJI and the host country prepare joint annual reports for the FCCC secretariat (separate reports may also be submitted). This process has been greatly facilitated by active and organized AIJ points of contact. In contrast, those countries with minimal institutional support or vague lines of authority have had difficulty in completing reviews and accepting project proposals.

U.S. VIEWS ON THE REVIEW OF THE AIJ PILOT PHASE

Since the creation of the AIJ pilot phase, the FCCC secretariat has received significant input from Parties and other sources upon which a comprehensive review of the pilot phase can be based. Multiple annual reports, statements, and submissions by Parties have all been made available to the secretariat. Furthermore, the secretariat has prepared synthesis documents from submissions and conducted its own research, for example, sponsoring several workshops on methodologies. By examining existing materials and representative projects contained therein, we believe that a thorough review of the AIJ pilot phase can be made in time for the fifth session of the Conference of the Parties. At that time, a conclusive decision, consistent with 5/CP.1, should be taken and the pilot phase should end so that attention may focus on the project-based mechanisms in the Kyoto Protocol.

**Submission of the United States on Inputs Concerning Parties'
Experience in Using the AII Uniform Reporting Format (URF)
February 12, 1999**

U.S. Comments on the Uniform Reporting Format

General

- The U.S. believes that the Activities Implemented Jointly pilot phase has provided the international community with an empirical basis on which to elaborate the project-level flexibility mechanisms included in the Kyoto Protocol. It is essential that project-based activities be conducted in a way that is credible, efficient, transparent and verifiable. An essential element to ensure these principles are met is a sound reporting system.
- Parties have recently submitted their third reports to the UNFCCC Secretariat on activities under the AII pilot phase. In compiling these reports Parties were asked to employ the Uniform Reporting Format that was adopted during the fifth session of the SBSTA. In submitting recent reports, the U.S. has found that the Uniform Reporting Format provides a beneficial framework by which to report in a clear and concise manner.
- The Uniform Reporting Format will prove valuable as the Conference of Parties considers conducting a comprehensive review of the AII pilot phase. Areas of reporting that are particularly important include credible information on baselines and projected emission reductions; quantitative assessment of benefits; additionality of financial obligations; plans for, and results of, monitoring of activities; and, verification methodology.
- There are a number of areas where experience gained in using the Uniform Reporting Format can lead to possible improvements in the reporting form. Experiences gained in reporting under the AII pilot phase will assist in the design of reporting requirements of the project-based mechanisms in the Kyoto Protocol. We recognize that Parties may have to provide additional guidance to the Secretariat in some cases, however, included below are the issues that we believe are key to improving the reporting format.

Key Inputs on Reporting Format

(1) Lack of Instructions and Definitions of Key Terminology

The UNFCCC format does not include detailed instructions on how to complete each section, and does not define much of the terminology that is critical to project reporting. In some cases, the UNFCCC format indicates that "methodological work will be required" in order to define key terms. Lack of instructions and terminology definitions has resulted in often ambiguous and inconsistent project reporting among Parties. For example, headings in Sections E, F, and G of the Reporting Format do not provide sufficiently clear instructions for completing these sections.

Recommendation:

- Provide clear instructions on a section-by-section and/or question-by-question basis for completing the form. These instructions should specify the type and level of detail of the information requested, and should define key terms. Keep instructions separate from section headings to make the form easy to follow.

(2) Length of the Completed Document

The UNFCCC format does not provide clear direction on the scope and level of detail of the responses requested of AII participants despite its great length. The reporting process also revealed information deficiencies, inconsistencies, and areas for improvement. Several sections could be modified, for example discussion of costs and GHG accounting methodologies, indirect GHG impacts, non-GHG impacts, risk factors and monitoring and verification activities. In other cases, the URF asks for a "yes/no" answer in cases where a summary of information would be more helpful.

Recommendation:

- Provide clear instructions on the level of detail to be provided in the Uniform Reporting Format. The level of detail should be sufficient to permit analysis and comparison of AII projects, but care should be taken to avoid imposing a substantial burden on the parties involved in project reporting.

(3) Tabular Format

- The UNFCCC Uniform Reporting Format uses tables, text boxes, and headings inconsistently to organize the information. Although the tabular format makes it easier to identify data entry fields and to find particular sections when flipping through the document, the tables also complicate the formatting and completion of the document. In general, the tables and text boxes make the pagination more difficult, resulting in wasted space and longer page counts. For example, the contact information table in Section A.2) could be simplified so that the contact information for multiple participants can fit onto a single page. Also, the tables in Section A.3, D., and H.3 require text responses in a narrow column. Lastly, in Sections A.4 and E., the orientation of the column and row headings does not allow one to report information for more than a few years.

Recommendations:

- Modify the tabular formatting to accommodate longer blocks of text where appropriate and to reduce wasted space by using the full width of the page instead of a narrow column.
- Re-orient the cost and GHG data tables in Section so that column and row headings are switched and data can be reported for an unlimited number of years. Identify formatting options if emission data are reported for more than four GHGs.
- If the UNFCCC Secretariat intends to post all project reports to their web site in a non-PDF format, specifications for formatting the reports should be provided, particularly with regard to layout and software.

(4) Ordering of Information

The placement of some sections in the UNFCCC format may not result in a logical flow of project information. For example, the separation of information on project costs (Section A.4) and funding sources (Section F) was problematic. Additionally, Section B could be moved to the second page of the report on each project so that it is easier to ascertain whether the host country government has approved the project report.

Recommendation:

- Modify the ordering of key sections of the reporting format. Order the sections on project costs and funding sources sequentially, and place them after the section on estimating GHG benefits.

(5) Lack of Opportunity for Reporting Allocation of GHG Benefits

The UNFCCC format does not present an opportunity to report information on the allocation of a project's GHG benefits among the project participants when applicable. This information could prove extremely useful in the future for informing policy development on GHG emissions crediting and trading. The information to be reported in this section could include (1) the methodology for allocating benefits, and (2) the list of beneficiaries and the percentage of benefits received.

Recommendation:

- Add a new section to the format for reporting the allocation of the project's GHG benefits, including (1) the methodology for allocating benefits and (2) the list of beneficiaries and the percentage of benefits received.

(6) Provision of Annual Updates

In FCCC/SBSTA/1996/15, the Secretariat indicated that each AII project team would need to complete the Uniform Reporting Format one time, and that subsequent reporting would consist of only the title of the report and any new or updated information. However, no additional guidelines were provided regarding the format of subsequent reporting. This reporting method might reduce the reporting burden placed on project participants, if the new and updated information is minimal. In addition, reporting of only new or updated information could complicate the review and analysis of project reports by independent parties, who would have to request, review, and integrate multiple updates to obtain correct information.

Recommendations:

- Instead of preparing annual updates as addenda to the original reporting document, prepare revised reporting documents in their entirety to facilitate the review and analysis of these documents.
- Provide guidelines for reporting initial and revised projections of project activities, and the activities actually implemented.

(7) Calculation of Project Costs

The URF requests information on cost of the project, cost of AIJ component, and cost per ton of avoided CO2 (in U.S. dollars), however, no instructions are provided for quantifying costs. This is problematic for the following reasons:

- need to define the scope of project costs and revenues and differentiate between costs of project development and implementation;
- need to differentiate between cost of project and cost of AIJ component;
- decide whether to discount cost over project lifetime and, if so, at what discount rate;
- account for changes in exchange rates; and,
- how to manage the use and disclosure of confidential business information (see below).

Recommendation:

- Develop detailed instructions on project-level cost accounting.

(8) Use of Confidential Business Information

The UNFCCC Uniform Reporting Format does not contain any provisions for addressing the use and/or reporting of confidential business information. In some cases, requesting detailed information from project participants raised important questions regarding the provision of confidential business information to the USJI/Secretariat, the UNFCCC Secretariat, and the general public.

Recommendation:

- Provide guidelines regarding the provision and use of confidential business information for the purposes of (1) ensuring project viability and verifying project results, (2) maintaining complete records for use only by AIJ Secretariats and/or the UNFCCC Secretariat, and (3) generating public reporting documents. The UNFCCC Secretariat should either specify that all of the information reported will be public information, or indicate that confidential information should be marked clearly, in which case it will be used for verification purposes only and will not be made public.