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#### 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.

FCCC/SB/1999/MISC.1

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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.

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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 AlJ

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 AlJ 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 AlJ 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.

## <u>Determination of GHG reductions attributable to Specific Projects and Experience in Reporting and Monitoring Emissions</u>

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**

AlJ 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 AlJ 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 then 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 AlJ 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 lessens 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 "All component" should also be defined clearly, so as to distinguish this from non-All component.
- 4. The title of Paragraph 5), i.e. "Mutually agreed assessment procedures" seems too noncommittal and needs to be elaborated clearly.
- 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
- 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 All 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 lessens learned with AlJ pilot phase

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

- 1. Nature of ALJ 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 repackaged as AlJ 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 AlJ projects.

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

The current AIJ projects under the pilot phase should assist enhancing the capacity building for the participating developing country Parties in dealing with AlJ 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:

All 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.

PAPER NO. 3: COSTA RICA

# 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.

<sup>1</sup> 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 Secretaria 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 pagó 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 (CO<sub>2</sub>). 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 CO<sub>2</sub> 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 hunsteinii*), 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 (MINAE) a través de FONAFIFO.

| Actividad                 | US\$/ha <sup>2</sup> | % /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.

 $<sup>^{2}</sup>$  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 inovativo 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 inscrita 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.

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

**PROYECTOS AC - FORESTALES** 

#### 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 competitiva. 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 Secretaria 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<br>Proyecto | Tipo de<br>Proyecto | Capacidad<br>Instalada (MW) | Producción Anual<br>GWh/año) | Costo<br>Total (US\$<br>millones) | Reducción<br>de<br>Emisiones<br>(tm C) |
|------------------------|---------------------|-----------------------------|------------------------------|-----------------------------------|--|
| Plantas<br>Eólicas     | Eólico              | 20                          | 98                           | 30.4                              | 506,720                                |
| Tierras<br>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<br>Proyecto | Tipo de Proyecto        | Costo Total<br>(US\$<br>millones) | Duración<br>(años) | Reducción<br>(tm C ) | de Emisiones<br>(tm CO <sub>2</sub> ) |  |
|------------------------|-------------------------|-----------------------------------|--------------------|----------------------|---------------------------------------|--|
| ICAFE/BTG              | Tratamiento de<br>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 Organo 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 la 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.

PAPER NO. 4: GERMANY

### 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

#### **Contents**

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Appendix I JIRC

Appendix II Table with AIJ projects

Appendix III General guidelines for baseline studies Appendix IV Comments on AIJ by host countries

Table 1 Netherlands Pilot Projects for Joint Implementation

Table 2 Number of AIJ projects, submitted reports to the UNFCCC secretariat and acceptance

by the Secretariat (June 1998).

Figure 1 Example of the complexity an AIJ project

#### 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 cooperation. 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-<br>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?

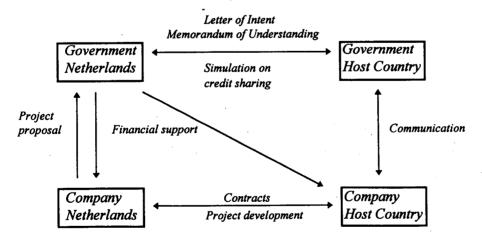
#### B. Experiences with AIJ

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 cooperation 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 en 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<br>(June 1998) | Number of projects<br>reported to the<br>UNFCCC | Reports accepted by the UNFCCC |
|--------------------|-----------------------------------|---|--------------------------------|
| Non-Annex I:       |                                   |   |                                |
| Bhutan             | 1                                 | 1   | 1                              |
| Costa Rica         | 2                                 | 1   | -                              |
| Ecuador            | 1                                 | 1   | -                              |
| Honduras           | 1                                 | -   | -                              |
| Indonesia          | 1                                 | -   | -                              |
| Uganda             | 1                                 | <b>-</b>  | -                              |
| Annex-I:           |                                   |   |                                |
| Czech Republic:    | 1                                 | 1   | 1                              |
| Hungary            | 3 .                               | 2   | 2                              |
| Latvia             | 1                                 | 1   | 1                              |
| Poland             | 2                                 | , <b>-</b>                                      | -                              |
| 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 an
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 AIJ projects

| Project title   | Project type                                   | Project owner<br>(executor)      | Participants in<br>Host Country                                     | Starting date                      | Duration<br>(years) | Annual emission reduction (ktonnes CO <sub>2</sub> ) | Cost per<br>avoided tonne<br>CO <sub>2</sub> (USD) | Letter of Intent |
|---|--|----------------------------------|---|------------------------------------|---------------------|--|--|------------------|
| Bolivia<br>Rural electrification in<br>the San Ramón Area               | Fuel   | CRE                              | Cooperativa<br>Rural de<br>Electrificación<br>(CRE in Santa<br>Cruz | Building phase: 1<br>Life time: 15 |                     |  | 1  | yes              |
| Bulgaria<br>District Heating  | Energy saving                                  | Government                       | -   | 01-01-1999                         |                     |  |  | yes              |
| Czech Republic<br>Krkonose, Sumava                                      | Reforestation                                  | Sep/Face                         | Krkonose<br>National Park,<br>Sumava National<br>Park               | 01-10-1992                         | 66                  | 100  | 15   | yes              |
| Hungary   |  |                                  |   | ·                                  |                     |  |  |                  |
| Energy efficiency improvement by Hungarian municipalities and utilities | Energy saving,<br>fuel switch                  | Government<br>(Novern BV)        | EGI/GEA   | 01-01-1994                         | 20                  |  | ∞  | yes              |
| RABA/IKARUS<br>compressed natural<br>gas engine project                 | Technology<br>transfer,<br>monitoring<br>study | Government<br>(Deltec, TNO)      | RABA, IKARUS,<br>AUTOKUT  | 01-01-1995                         | 20                  | 0-25   | 16   | yes              |
| Redesign energy process at Bacstej                                      | Energy saving                                  | Government<br>(Hanze<br>Consult) | Bacstej Kft.  | 01-01-1998                         | 10                  | 2  | 138  | yes              |

| Project title   | Project type                                | Project owner<br>(executor)                              | Participants in<br>Host Country            | Starting date | Duration<br>(years) | Annual emission reduction (ktonnes CO <sub>2</sub> ) | Cost per<br>avoided tonne<br>CO, (USD) | Letter of<br>Intent |
|---|---|--|--|---------------|---------------------|--|--|---------------------|
| Latvia  |   | •  |  |               |                     |  |  |                     |
| Boiler replacement and cogeneration in Adazi and Lielvarde      | Energy saving                               | EDON   | EDON Latvijas                              | 01-11-1997    | 1                   | 3.4  | 1                                      | yes                 |
| Poland  |   |  | •  |               |                     |  |  |                     |
| Sustainable heat and power                                      |   | EDON   | Energetyka<br>Poznanska                    | 01-11-1997    | 15                  | 23   | 30                                     | yes                 |
| Improvement of energy supply at Byzcyna                         | Replacement coal boilers by low NO, boilers | Government<br>(TNO / MEP)                                | Municipality of<br>Byzcyna                 | 01-01-1998    | 15                  | 2  | 80                                     | yes                 |
| Anaerobic waste water treatment in sugar industry               | Reduction of methane                        | Government<br>(Haskoning)                                | State Committee for Food Industry          | 01-01-1998    | 10                  | 115  | -                                      | yes                 |
| Energy saving at heat and power plants                          | Efficiency improvement                      | Government (KEMA)  | Ministry of<br>Energy                      | 01-01-1998    | Ω.                  | 180  | 2                                      |                     |
| Romania   |   |  |  |               |                     |  |  |                     |
| Emission reduction at power plant                               | Energy saving                               | Government (Sep/KEMA)                                    | RENEL                                      | 10-10-1997    | 5                   | 270  | _                                      | yes                 |
| Improvement of waste water infrastructure at Tarou Mures        | Energy saving<br>and methane<br>reduction   | Government<br>(Haskoning)                                | RAGCL (water<br>company of<br>Targu Mures) | 01-01-1998    | 10                  | 18   | 7                                      | yes                 |
| Energy efficiency in drinking water supply                      | Improvement of damaged infrastructure       | Government<br>(DHV)                                      | RAGCL                                      | 01-01-1998    | 2                   |  | •                                      | yes                 |
| Reduction of CO <sub>2</sub><br>emission at SC Rafo<br>Refinery | Energy<br>efficiency                        | Government<br>(Raytheon<br>Engineers and<br>Constructors | Rafo SA Oil<br>Refinery                    | 1998          |                     |  | •                                      | yes                 |

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

| Russian Federation       |                          |             |                          |            |    |     |     |       |
|--------------------------|--------------------------|-------------|--------------------------|------------|----|-----|-----|-------|
| Horticultural project    | Agri- and                | Government  | RITZA                    | 01-11-1994 | 15 | 2   | 100 | , sek |
| Tyumen                   | horticulture,            | (VEK)       |                          |            |    |     |     |       |
| Sanitary landfill with   | Reduction of             | Government  | Geopolis                 | 01-01-1994 | 10 | 265 | 4   | yes   |
| energy recovery in       | methane                  | (Grontmij)  | Consulting               | 1          |    |     |     |       |
| Moscow region            |                          |             | Engineers                |            |    |     |     |       |
| at brick                 | Energy saving Government | Government  | KCCM                     | 01-01-1998 | 5  |     | •   | 2     |
| company in Tatarstan     |                          | (Haskoning) |                          |            |    |     |     |       |
| Tikhvin district heating | Renewable                | Government  | ECOENG                   | 01-01-1998 | 2  | •   |     | yes   |
|                          | energy                   | (Biomass    |                          | ,          |    |     |     | -     |
|                          |                          | Technology  | -                        |            |    |     |     |       |
|                          |                          | Group)      |                          |            |    |     |     |       |
| Boilerhouse              | Energy saving Government | Government  | Government of 01-01-1998 | 01-01-1998 | 2  | ı   | 1   | 9     |
| Bolshemurashkino         |                          | (Tebodin)   | Nizhny Novgorod          |            |    |     | .5  |       |
|                          |                          |             | T                        |            |    |     |     |       |

yes

St. Committee for 01-01-1998 Energy Conservation

Government (Haskoning)

**Energy saving** 

Ukraine Energy saving at glassworks

| Project title   | Project type           | Project owner<br>(executor) | Participants in<br>Host Country              | Starting date | Duration<br>(years) | Annual emission reduction (ktonnes CO <sub>2</sub> ) | Cost per<br>avoided tonne<br>CO, (USD) | Letter of Intent |
|---|------------------------|-----------------------------|--|---------------|---------------------|--|--|------------------|
| Anaerobic waste water treatment in sugar industry           | Reduction of methane   | Government<br>(Haskoning)   | St. Committee for<br>the Food Industry       | 01-01-1998    | 10                  | 115  | 1                                      | yes              |
| Energy saving at heat and power plants                      | Efficiency improvement | Government<br>(KEMA)        | Ministry of<br>Energy                        | 01-01-1998    | 2                   | 180  | 2                                      | yes              |
| Bhutan  |                        |                             | •  |               |                     |  |  |                  |
| Kilung-Chuu Micro<br>Hydel Bhutan                           | Sustainable<br>energy  | Government (ETC)            | Division of Power (DoP), NEC                 | 01-01-1996    | 10                  | ₽  | >150                                   | yes              |
| Costa Rica  |                        |                             |  |               |                     |  |  |                  |
| Waste water treatment Reduction of at coffee plants methane | Reduction of methane   | Government<br>(BTG)         | Private and co-<br>operative coffee<br>mills | 01-11-1997    | 10                  | 127  | 4                                      | yes              |
| Indonesia   | ·                      |                             |  |               |                     |  |  |                  |
| Gunung Leuser   | Reforestaion           | Sep/Face                    | Gunung Leuser<br>Foundation                  | 1998          | 66                  | •  | ı                                      | 02               |
| Ecuador   |                        |                             |  |               |                     |  |  |                  |
| Profafor  | Afforestation          | Sep/Face                    | INEFAN                                       | 01-06-1993    | 66                  | 350  | 4                                      | yes              |
| Uqanda  | !                      |                             |  |               |                     |  |  |                  |
| UWA-Face  | Afforestation          | Sep/Face                    | Uganda Wildlife<br>Authority                 | 01-08-1994    | 66                  | 200  | ω                                      | yes              |
|   |                        |                             |  |               |                     |  |  |                  |

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. annual reduction emission, excluding operational costs or benefits. Most calculations are based on information from the projects' feasibility studies, since the projects have Please note that the cost per avoided tonne carbon dioxide is calculated as the present value of the annual government's contribution to the AIJ-project divided by the 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.