GSSD Reports
Activities Implemented Jointly:
A New Synthesis of Issues, Realities, and Contentions

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1. INTRODUCTION: CONCEPT and CONTENTIONS

The purpose of this Synthesis is to present the "contours" of concepts and practices related to activities implemented jointly -- taking into account what has been accomplished so far and what must now be done. Both the achievements and the obstacles need be viewed realistically, given the diversity of nations, prevailing differences in socio-economic conditions, and potentials for effective investments jointly undertaken. Also important is to review prevailing conflicts and contentions surrounding this concept and possibilities of resolution in light of potentials for effective international cooperation.
AIJ projects "on the ground" invariably encounter the realities of investment codes, project financing, public sector investment programs, and so forth -- all of which serve as critical contextual factors for such projects. These need be properly assessed, from the perspective of all of the key stakeholders.

1.1 AIJ Context

The AIJ context is an innovation in the area of national responses and of international cooperation in the post-Rio strategies toward environmental management and sustainability. This response is characterized by a pragmatic stance and a practical orientation, but it is also contentious, given critical issues of viability and effectiveness as well as equity and reciprocity.

Introduced initially in Article 4a of the Framework Convention on Climate Changes, the concept of joint implementation has received considerable attention, nationally and internationally. The First Conference of the Parties to the FCCC (COP1) in Berlin, 1995, concluded with the agreement to initiate a pilot phase, on a voluntary basis, applicable to all parties to the Convention.

The Pilot Phase is intended to end no later than December 31, 1999 and will not involve credits to any Party from joint activities nor be constrained by the need to reach prior agreement on credit. This decision led to the term "activities implemented jointly" (AIJs) in lieu of "joint implementation" (JI).

1.2 Range of Views

The core concept focuses on increases in the cost-effectiveness of policies to reduce climate change which can be obtained from the international differences among countries in marginal costs of response. An extension of the core concept refers to countries engaged in AIJ projects to address a range or environmental priorities in project design and execution.

The translation of the idea of AIJ and JI into a reality needs (a) more clarification in definition, measurement, and verification and (b) increased support worldwide for that strategy. These two factors are connected to each other; without validation of the strategy there can be little added support; and withouth effective support, there is limited prospects for validation. This paradox highlights the political dilemma created by the existence of a wide range of views about the conept itself.

At one end of the spectrum is the FCCC clause that identifies JI as a mechanism related to climate change. At the other are extensions of the concept relationg the environmen to sustainable development. The AIJ concept now spans from the "pure-climate change" focus, all the way to comprehensive "sustainability" focus. There is also a sharp contention between those (developing) countries that view AIJ as a means by which other (industrial) countries could avoid meeting their commitments under the terms of the FCCC.

In addition to differences in national understandings of the concept are differeces in project design and implementation and in views related to the sustainabilty of projects themselves.1 But, there is no uniformity of views among the industrial or the developing coutries themselves.

We will return to the range of views as we consider financial, technical, and other dimensions of AIJ projects --- in theory and in practice.

1.3 The AIJ Imperative

Why it is important that the AIJ Pilot Phase succeed? One answer is that projects of this type can provide the Subsidiary Body for Scientific and Technological Advice (SBSTA) the kind of information necessary to assess that phase and to advise on the potentials and vialbility for the full-operative JI phase in practical terms. Another is that there is a broad, but far from universal, support for this type of strategy. And evidence must be developed to hlep clarify views and polititical reactions. A thirs is that practical details are yet to be worked out; indeed, "the devil is in the details," and without actual practice, we will remain with only theory and political conflict. Finally, failure of the Pilot Phase will increase the likelihood of failure in reaching overall FCCC goals.

The reality is, of course, that if that phase does not succeed, then those developing countries that have supported the JI strategy will be forced to side with the developing countries that register skepticism. If the Pilot Phase fails -- or if it is viewed as increasingly suspect -- then what are the alternatives for OECD countries to meet their commitments under the terms of the FCCC?

Drawing upon a convenient metaphor, for the moment, if it takes "two to tango," what if a group of countries decides to forego? And what kind of "tango" can be done with only one group? The flaw in this metaphor, clearly, is that the "no-tango" option carries little political or diplomatic risk, but only potentially serious environmental ones. And there are immense risks if there were to be "no-success" for the Pilot Phase -- for developing as well as industrial countries.

Should a large number of developing countries (most notably the larger ones) withdraw their support for this strategy, then the international community as a whole will be hostage to the resumption of growth strategies based on the historical trajectory of the West, namely, one that is polluting, eroding, and threatening to life-supporting properties on this earth.

For the industrial countries, in particular, are the costs "at home" of failure in the Pilot Phase. These countries will be faced with two options: either to adopt costly and potentially painful domestic adjustment polices or to forego all possibilities of stabilization or reduction on greenhouse gas emissions. Neither of these two options is particularly attractive.

But what are the facts? If any? And what could or should be done next? If anything?

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1. See R. Dolzer "AIJ and JI: Concepts, Issues, and Position," 1996, pp. 2-5 and 8, for more on the issue of no-consensus.

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2. THE AIJ RECORD: PROJECTS and STATUS

If there is one simple way of characterizing the AIJ practice, it is by asking: "Who does What, When, Why, and How?" The answer shows the practical side of AIJ. It also may show the potential differences among parties regarding who should do what, when, why, and how. Clearly, the answers will show what actually happens in AIJ projects "on the ground." And this is important in order to give the international community an operational understanding of the concept and its "contours."

The question of: "Who does What, Why, and How?" invariably leads to a surfacing of contentions around the questions of: "Who gets What and Why?" If international consensus is to consolidate around some AIJ operational concept, it will have to converge on the features of "who does" as well as "who gets."

2.1 AIJ Projects to Date

It is fair to say that overall, the international community is probably not going be aware of the existing AIJ portfolio. Further, there is no unified framework within which such projects are reported. Therefore, the "real picture" is difficult to determine with precision.

According to a survey undertaken by the Secretariat of FCCC, there are 32 cases designated as AIJ projects. Of these, 13 were ongoing, 17 in a planning stage, and 2 of rather unclear status. Figure 1 shows the location of projects; and Table 1 shows this "portfolio" in terms of focus and number of projects.1

TABLE 1
The AIJ "Portfolio"
Based on Project Listing of
National Reporting to FCCC Secretariat

FOCUS	NUMBERS
• Energy efficiency	(5)
• Renewable energy	(12)
• Fuel switching	(5)
• Forest preservation, restoration, or reforestation	(5)
• Afforestation	(4)
• Fugitive gas capture	(1)

In practice, however, only a small number are actually implemented, and an even smaller number provide any kind of "track record." This means that for all practical purposes, the "data base" of real cases is highly limited. In terms of financing, the cases are limited in number, therefore yielding relatively little in terms of baseline information; and even those that are in the process of being seriously developed provide very little information regarding cost structure or financial profile. In short, the track record is sketchy. All of this may support the view that to date, "talk" continues to be much greater than "action."

2.2 Important Challenges

Unless greater clarity emerges -- and more consensus -- the current portfolio is not likely to provide the information needed. Among the most salient challenges that require some resolution (and possible some consensus) are:

- reducing ambiguity on criteria for project selection;
- eliminating uncertainties about the entire process after selection;
- managing difficulties in securing finance;
- finding ways of meeting the "needs" of the parties (investors and hosts);
- putting in place the required framework and follow-up related to monitoring, reporting, and replication.

Some of these factors are more easily managed than others. The "bottom line" is that given the novelty of the AIJ experience, this strategy is one being developed in "real time," namely as the projects themselves evolve. Invariably, this may mean trail and error, as well as development of the AIJ process itself while the projects are being formulated. Current thinking about "good projects," viable criteria, and financial requirements is highlighted in the following sections of this Synthesis.

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1. By far the greatest is on CO2.

3. IMPROVING AIJs: DESIGN, IMPLEMENTATION, REPLICATION

3.1 Defining the Basics

The Criteria

The criteria for AIJ projects remain unclear, but they are generally agreed upon. Among the commonly noted criteria are (a) prior approval or endorsement by the host government; (b) compatibility with national goals and development strategies; (c) institutional capacity of the host country; and (d) "additionality" of environmental benefits. It is this last criterion that is potentially contentious in that the amount, nature, and implication of the "additionality" at hand can itself be difficult to resolve. Further, the additionality factor is intimately tied to methodological and measurement issues which themselves need some prior resolution.1

Beyond these basics is a most fundamental issue of the sustainability of the project itself. Whether that should be considered as a criterion or an objective remains to be seen. Nonetheless, the fact remains that some kind of "longevity" appears to be emerging as an issue of importance.

Six industrial countries have provided some message about their preferred criteria, namely the Netherlands, Germany, the United States, Canada, Australia, and Japan. In the developing world only Costa Rica has published its evaluation criteria.

The Benefits

Clearly the matter of "benefits" is of utmost importance. Unfortunately, that issue too is surrounded with some ambiguities of both a conceptual and a computational nature.

(a) The focused benefits calculus concentrates on the measurement of greenhouse gas emission reductions associated with an individual project. This is the most commonly used approach to think about AIJ benefits. Specifically, it is framed as:2

Net Project Benefits = Reference Case - Project Case.

This means that some reference case must first be calculated, and then the gains related to the project identified, and the difference results in that net gain. Methodologically, this means that a base case must be developed, a historical referent case, and then a project assessment.

Of course, including (or excluding) various sources and/or sinks, choosing among alternative scenarios for the reference case, and selecting a static versus a dynamic reference are all issues that add further challenges to the matter of measures. This is not easy, nor is it easy to provide confidence bounds (or measures of error) for these estimates.

(b) The broader benefits calculus begins with the net benefits and then incorporates them into a wider calculation to include specific factors of concern to the host country based on its national priorities. Most typically such factors include capacity-related issues, technology access, possibilities of "leapfrogging technologically, and others. Here of course, the calculations are situation-specific, over and above the basic net benefit measures.

(c) The additionality: The additionality calculation is related to, but distinct from, (a) and (b) above. As articulated by the United States, "additionality" is defined as gains associated with the project

which "would not have happened anyway." This is an interesting way of thinking about "addition," but rather restrictive in nature.

A more comprehensive view of additionality is one that specifies more clearly the ways in which additionality can take place over and above those specified by the US programs. The added-additionality could well relate to (i) overall program performance as well as (ii) other sustainability issues. Clearly, the more additions to the additionality, the more that issue begins to look like the broader calculus.

The Costs

In the absence of a good track record, we cannot identify the true costs of AIJ projects. But we can sketch out the cost-elements that have to be taken into account. These are:

(a) the transaction costs: what it costs to develop the project in the first place;

(b) the direct project costs: the overall of the financial resources required for bringing the project on line;

(c) the risk-based costs: these include the uncertainties and potential burdens associated with the introduction of new technology, management, rules, etc.;

(d) the opportunity cost: benefits foregone if the project were not undertaken;

(e) the institutional costs: which internalize the transaction costs (in conjunction with management costs internationally) in order to highlight other relevant costs that need to be recognized early on.

The Crediting

Among the thorniest issues is that of "crediting."3 The idea is that voluntary measures such as AIJ (or JI) can result in emission reduction at lower costs than if there were a rigid system of obligations for parties to meet their obligations within their own territorial boundaries. The thorny part is answering the question of: who gets how much credit, in what context, and measured how?"

This is why it is thorny: In the post-pilot phase, if a host country accepts a project as a JI initiative, it is permitting the investing country to (potentially) use the greenhouse gas emission reduction as offset credits of the project against its own emission reduction commitments, either current (in the case of industrialized countries) or potential future commitments (in the case of developing countries). In either case, the host country would not be able to obtain credit in emission reduction from the same project.4

To proceed effectively, the parties need agree on each part of this question, and obligations commitments need be made explicit and agreed upon.

The Accountability

Everyone agrees that accountability of projects is crucial and that without accountability problems that may emerge as project liabilities might evolve into political liabilities, and that if this happens, political problems could, at a minimum, become highly embarrassing to all concerned.

The specific question is this: Who is to be accountable to whom for what and how ?

Clearly there are no simple answers. But unless there is some initial meeting of the minds on the who, whom, what, and how, a new cost factor will arise (to be added to the listing above), namely the accountability costs.

All of this brings us to the matter of project design and to current thinking on how to improve the entire process from its inception to its implementation.

3.2 Project Design and Tracking Performance

It goes without saying that how one designs a project depends on what one seeks to accomplish. Hence the terms of reference are important. This basic fact brings us back to the contentions summarized in Section 1.2 above, and to apparent differences in views regarding precisely what it is that an AIJ project is intended to accomplish (or not). For example, if the objective is to design a project that generates focused benefits, then the process may be different than if the goal is to create broader national benefits.

In either case, some actions can be taken to enhance support for the project and to minimize negative impacts. At a minimum, involving stakeholders at the onset is a good idea and reminding the parties that costs and impacts need be viewed in both local as well as global terms. Consensus is always an asset; it is seldom a liability.

Furthermore, clearly AIJ projects can be operative in at least three modes (and at three different levels):5 (a) among governments, (b) among private parties, and (c) a combination of these modes.

The entire AIJ process from design through to replication of AIJ projects is shown in Figure 2.6 We can literally "walk through" the steps shown in this Figure (the entries, the arrows, and the sequence) to get a sense of what has to be done and, perhaps, how it is to be done. Figure 2 shows the points of relevance and suggests the sequence of actions and reactions. The latter may be subject to revision, but the points of relevance (i.e., who and what) are relatively fixed.

These issues relate to: how can a "good" project be replicated in other places (as relevant); and how can the project itself (and its benefits) be maintained over time? If the project is high-risk, it will not be replicated, nor is it likely to be sustainable in its own right. This is why it is important to make reasonably good calculations in terms of costs, benefits, and impacts.

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1. See Kenneth Andrasko, Lisa Carter, and Wytze van der Gaast "Technical Issues in AIJ Projects: Background Paper for the UNEP AIJ Conference," 1996, for a detailed discussion of criteria.

2. See by Andrasko et. al., "Technical Issues in AIJ Projects," 1996, p. 15.

3. There is no simple way to summarize the contentions on this issue. See, for example, R. Dolzer "AIJ and JI: Concepts, Issues, and Positions," 1996, p. 10-11.

4. See S. M. Petricone, "Reason to Believe? AIJ Project Financing and the Future of the AIJ Pilot Phase for pro-AIJ Developing Countries," Discussion Paper for AIJ Open Forum, San Jos■, Costa Rica, 29-31 October 1996.

5. This reminder is drawn from R. Dolzer, "AIJ and JI: Concepts, Issues, and Positions," 1996, p. 5.

6. Figure 2 is adapted from the logic presented in Andrasko et. al., "Technical Issues in AIJ Projects," 1996, Figure 8, p. 31. The original logic focuses on monitoring verification and reporting. The extensions we propose above address the matter of learning across projects and the importance of thinking about replication.

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4. STRATEGIC MOVES to SUPPORT AIJ INITIATIVES

"Marching to one's own drummer" may be politically satisfying and responsive to domestic constituencies. Far more effective from a global perspective, however, would be marching to coordinated "drummers" playing diverse tunes, but along a common tune, and moving in the same direction. Therein lies the necessity for strengthening "next-moves" on finance, technology interface, capacity-building, and institutional supports.

These moves are reviewed below.

4.1 Financial Realities

The Climate Change Convention does not regulate finance. And the Global Environment Facility covers specifically the incremental costs. For all practical purposes, matters of finance remain open. The idea is that investors will come forth. The reality is that few have done so to date. A "wait and see" attitude combined with other factors has created a slow start.1

More pressing are the charges that "wait and see" has actually resulted in "all talk and no action." And there is a general sense that when it comes to finance, everyone is moving very fast while standing still and going nowhere.2 For example, 11 of the 15 projects approved by the US Initiative on Joint Implementation (USIJI) are not yet financed; and only 13 of the 32 AIJ Project Reports submitted to the FCCC Secretariat (see Figure 1) are actually in execution.3

If finance is not forthcoming, projects will not be executed. If they are not executed, there will be insufficient experience with the AIJ concept (i.e. hence there will be no "reality" to review). If there is no reality to review, the AIJ initiatives will collapse. And if they collapse, it goes without saying that developing countries' support will also disappear. So far, those developing countries that have been favorably inclined toward this type of initiative have, in fact, been responsive to calls for discussion on potentials for action.

In addition to the usual finance difficulties, there are further constraints on project execution tied specifically to the matter of financial "additionality." In the context of USIJI, this means that projects should demonstrate that "the measures undertaken were above and beyond what would reasonably have been or be likely to occur otherwise."4 In practice, it is very difficult to make that determination with any degree of precision, especially in areas such as energy.

The contention here is whether to focus on projects that would "be likely to occur otherwise" or, alternatively, to reframe the challenge as enabling AIJ to "bring about truly additional benefits by leveraging investments where it would otherwise not exist."5 Uniformly, developing countries are in need of new investments and new potentials for exports of goods and services.6

Leveraging investments would be a significant strategic move.7 Debates create delays. And delays may make developing countries argue that the Pilot Project phase is a form of "emissions rights giveaway." If leveraging investments were seriously undertaken, it could provide a basis for "win-win" strategies in the AIJ - JI domain.

4.2 Technology and Capacity-building

Matters of technology and capacity-building are intimately connected. Usually they are treated as a separate issue. Here we proceed on the assumption that (a) effective technology performance (including collaboration, transfer, and trade) leads to improved capacity-building and, by the same token, (b)

effective capacity-building measures result in enhanced technology performance. This is the logic:

(a) Technology leads to Capacity

As a general rule, commercially viable technologies that are not "on the market" are conventional technologies; seldom do they respect the state of the art. And it is conventional technology that has contributed to the environmental degradations that we are now facing. Therefore, everyone needs access to improved technological performance.8 Usually this matter is considered as a developing country issue, but advanced industrial countries also are in quest of "new technology."

The question then is: how can AIJ and JI projects be designed such as to:

(i) avoid replication of outmoded technologies;

(ii) protect the gains to the innovators; and

(iii) eliminate obstacles for acquisition of "better technology" by developing countries.

One important strategic move needed at the present time is the formulation of a "AIJ-JI Technology Strategy Working Group" whose task would address some of the concerns of the public and private sectors in both host and investor countries. At a minimum, it could serve as forum to address some of the key technology-related issues in a systematic and problem-solving mode. It could also focus on operational challenges related to capacity-building in AIJ-project areas.

(b) More Capacity leads to Better Technology

The matter of capacity can be stated in terms of determining: what type of capacity, for whom, and how?

Strengthening capacity of Annex I countries, of non-Annex I countries, of the investors (business, firms, etc.) may be related issues, but they are also quite distinct in terms of needs and requirements. Further, enhancing capacity in terms of project management, linkages to sectional performance, and/or to overall industrial activity consists of yet another set of capacity needs. From the perspective of the country which is accepting an AIJ project, the capacity building issues are viewed as central to the overall initiative. Specifically, AIJ projects, and the building of capacity, must complement national development plans.9 Capacity challenges are extensive, to be sure, but the needs are very specific. These include improving the capacity to:10

- formulate reliable baselines
- validate any global overlay initiative
- strengthen existing baselines
- formulate basic project information requirements
- identify and adopt "cleaner" technologies
- evaluate and update country and project assessments
- incorporate "learning" to reinforce capacity
- improve connectivities between "technology" and "capacity" actions

All of this means that, in addition to national capacity-building, there is the need to develop a "mutually beneficial business condition."11 This also means that investors and their governments need to improve their own capacity to interact "in the field" around these issues.

If the AIJ pilot phase is to become a truly global strategy, then developing countries must be able to engage meaningfully in the deliberation process. Engaging potential stakeholders in AIJ

discussions would contribute to raising national capability to engage in, and contribute to, AIJ project formulation and implementation.12 The non-governmental organizations have been most articulate in addressing the stakeholder issue and potential connections to capacity-building. But their strategies have been diffuse and diverse, thereby diluting the total net impact somewhat.

It goes without saying that nothing significant can be done on technology or capacity unless institutional supports are put in place. These are required to help "deliver" the services and activities (products and processes) that help strengthen technology and capacity. Therefore, ways must be found to address institutional requirements for technology and capacity; that in itself would be an important strategic move.

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1. See R. Dolzer for factors that may have contributed to "slow start," in "AIJ and JI: Concepts, Issues, and Positions," 1996, especially p. 16.

2. See for a review of the risks of no-finance and no-action, S. M. Petricone, "Reason to Believe?", 1996, especially Sections I and II.

3. S. M. Petricone, "Reason to Believe?", 1996, Section I, III.

4. As cited by S. M. Petricone, "Reason to Believe?", 1996, Section III.

5. This alternative formulation is put forth by S. M. Petricone, "Reason to Believe?", 1996, Section III-A.

6. S. M. Petricone, "Reason to Believe?", 1996, Section III.

7. There are other aspects of the financial additionality that are contentious as well. But, in the last analysis, without action, then can be no impact. Without financing AIJ projects, there will be "track record." The net result will be "more and only talk."

8. This issue is addressed in the Final Report to UNEP prepared by MIT on "Toward a Global Partnership: Consortium on Technology, Environment, and Sustainable Development," Project number: FP2101-92-03 (3035).

9. R. S. Maya, "Capacity-Building for Analyzing and Implementing AIJ Programmes in Africa," 1996.

10. Adapted from R. S. Maya, "Capacity-Building for Analyzing and Implementing AIJ Programmes in Africa, 1996.

11. Adapted from R. S. Maya, "Capacity-Building for Analyzing and Implementing AIJ Programmes in Africa," 1996.

12. Recognition of stakeholder interests is contingent on the capacity of stakeholders to be aware of their own interests, the features of AIJs as related to these interests, and their capability to articulate their resultant assessments.

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5. ELECTRONIC CONNECTIVITY for AIJ PERFORMANCE

Given the rapidly expanding deliberations about the merits of AIJ strategies, it is imperative that all parties secure rapid and effective access to this evolving information base. The only effective way of securing such access is through advanced electronic networking systems.

5.1 Potentials for an "AIJ-Watch"

Already JI On-line provides access to projects in the pipeline, or at a relatively advanced stage in the approval process. That service is important in its own right, but its benefits would be greatly enhanced if coupled effectively with more advanced modes of global electronic information systems designed specifically for addressing the multidimensionality of sustainable development.1

In other words, the international community and all the stakeholders should have transparent access to potential linkages between AIJ projects, on the one hand, and implications for other sectors and for national polices and programs, on the other.

5.2 JI and AIJ on Internet

At present, almost every country in the world is "wired" electronically. Even last year's assessment of global electronic connectivity (now out of date) shows a highly connected global system (See Figure 3). All but a handful of countries worldwide (under 10) remain un-connected to the rest of the world through some form of electronic medium, such as the Internet, bitnet, or e-mail.

The Global System for Sustainable Development (GSSD), developed at MIT, is directly relevant to the issues in this Synthesis. GSSD provides a practical vehicle for connecting project information (such as that available on JI-Online) to other Internet resources in a systematic and sustained way. If, for example, it is used with other resources (such as JI Online or other sites of information), GSSD serves as a powerful platform with networking capabilities for countries at all levels of development.

On a global basis, the core technological connectivity is largely in place. The challenge now is to expand access to substantive connectivity, i.e., to enhance the access of all countries to information about debates, dimensions, and developments of the project during this Pilot Phase. The task now is to enhance communication -- for coherence, capacity, and consensus.

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1. This same issue is at the core of the evolving strategy of connecting the UNDP Sustainable Development Networking Project (SDNP) to the GSSD as an integrative form of access to the resources of the World Wide Web on the Internet. This strategy is being developed in conjunction with UNDP's contribution to the UN Commission on Sustainable Development's assessment of major international developments since UNCED for the post-Rio Review mandated by the General Assembly for 1997.
