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**NATIONAL SYSTEMS FOR FLEXIBLE MECHANISMS: IMPLEMENTATION ISSUES IN
COUNTRIES WITH ECONOMIES IN TRANSITION**

Workshop Report

OECD, IEA and IETA Information Paper

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FOREWORD

This document was prepared in 2002 at the request of the Annex I Expert Group on the United Nations Framework Convention on Climate Change. The Annex I Expert Group oversees development of analytical papers for the purpose of providing useful and timely input to the climate change negotiations. These papers may also be useful to national policy makers and other decision-makers. In a collaborative effort, authors work with the Annex I Expert Group to develop these papers. However, the papers do not necessarily represent the views of the OECD or the IEA, nor are they intended to prejudge the views of countries participating in the Annex I Expert Group. Rather, they are Secretariat information papers intended to inform Member countries, as well as the UNFCCC audience.

The Annex I Parties or countries referred to in this document refer to those listed in Annex I to the UNFCCC (as amended at the 3rd Conference of the Parties in December 1997): Australia, Austria, Belarus, Belgium, Bulgaria, Canada, Croatia, Czech Republic, Denmark, the European Community, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Latvia, Liechtenstein, Lithuania, Luxembourg, Monaco, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Russian Federation, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, United Kingdom of Great Britain and Northern Ireland, and United States of America. Where this document refers to “countries” or “governments” it is also intended to include “regional economic organisations”, if appropriate.

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Part I.

Workshop Report

Executive Summary

The focus of this workshop was on institutional issues and capacity building needs for the three types of “national systems” to be set up under the Kyoto Protocol¹: (1) emissions inventories; (2) national registries; and (3) Joint Implementation (JI) and Emissions Trading (ET).

The workshop discussions identified recommended actions that national governments could take in order to improve the institutional set-up for their "national systems". It also outlined the links/similarities between the different national systems and highlighted the need for long-term strategic planning by governments. Finally, discussions identified capacity-building needs for each national system.

The workshop began by outlining the different requirements for national systems that need to be set up under the United Nations' Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol (KP), examining them from the perspective of countries with economies in transition (EITs).

A number of cross-cutting themes emerged as conclusions:

- the European Union (EU) accession process plays an important role in shaping future environmental performance in accession countries;
- significant differences exist between transition countries (some being able to meet their Kyoto target easily, others not);
- awareness of the challenges at high management and political levels is essential to achieve the institutional changes and funding increases needed; and
- ensure that procedures designed to increase business interest in market mechanisms are quick, simple and cheap to implement.

¹ The Kyoto Protocol refers to “national systems” for emissions inventories. However, systems - set up at a national or regional level - for registries and in order to participate in JI/ET will also need to be set up. This report refers to all such institutional procedures and set-ups as “national systems”.

Background

As part of work done under the aegis of the Annex I Expert Group, the OECD, IEA and International Emissions Trading Association (IETA) co-organised a workshop on "National systems for flexible mechanisms: implementation issues with economies in transition". The workshop took place in Szentendre, Hungary on 13-15 May 2002 with Enno Harders (Germany) as Chair.

The focus of this workshop was on institutional issues and capacity building needs for the national systems that need to be set up under the Kyoto Protocol in order to: (1) prepare emissions inventories; (2) set up and maintain registries; and (3) participate in Joint Implementation and Emissions Trading. Participation was broad, encompassing more than 100 participants, from 26 countries and regional organisations, with representation by governments, business, industry, inter-governmental organisations, non-governmental organisations and academia.

1. Introduction: key national systems for Kyoto Protocol Implementation

Presentations in this session focused on why "national systems" were needed, what the functions of such systems would be and on the implementation context within the EITs.

In the context of this workshop, "national systems" refer to a broad set of procedures, institutions and legal frameworks needed at the national level to participate in the flexible mechanisms (Joint Implementation and Emission Trading). This includes essentially four different, yet interrelated, systems. The first two systems are monitoring and reporting systems that are required under the Kyoto Protocol: a national system to prepare national greenhouse gas (GHG) inventories –which is the only system effectively mentioned in the Marrakech Accords as a "national system"–, and the national registry. In addition, two other systems are also needed domestically to participate in the flexible mechanisms, although they are not required under the Protocol, namely a domestic emission trading system and a domestic framework for Joint Implementation.

Eligibility requirements to participate in the flexible mechanisms (JI and/or ET) are set out in the Marrakech Accords. Minimum requirements for a country opting to participate in "track 2" JI only (i.e. to issue and transfer ERUs) are to be a Party to the Kyoto Protocol, to calculate and record its assigned amount, and to establish a registry. Countries also wishing to participate in "track 1" JI (i.e. to acquire ERUs), emissions trading or the Clean Development Mechanism (CDM) also need to have a national system in place to calculate greenhouse gas emissions and removals (i.e. a national inventory system), to have submitted the most recent inventory, and to have submitted "supplementary information".

In addition to requirements under the Kyoto Protocol and Marrakech Accords, EIT countries that are in the process of accession to the EU will also need to implement EU legislation. Current and planned legislation covers issues related to setting up "national systems". For example, proposals for an emission trading scheme, and an amendment to the Council Decision on national programmes and annual inventories are being discussed, and Directives on JI/CDM and registries may also be developed.

Enshrining KP requirements in national and community law will ensure that they become more enforceable, as there may be penalties for non-compliance. This may help encourage governments, particularly in countries with limited resources such as EITs, to raise the priority of establishing and maintaining climate change-related "national systems".

2. National Systems for GHG Inventories

2.1 Key international requirements and priority setting

Preparing national GHG inventories and setting up national inventory systems are key eligibility requirements for Parties that wish to participate in the Mechanisms (Emission Trading and Joint Implementation-track 1). Inventory-related Guidelines adopted under the Convention and Protocol form the basis upon which such eligibility will be assessed. Therefore, national inventory teams need a good understanding of these Guidelines, including elements in these Guidelines that can help them to set priorities in their efforts to establish and/or upgrade their national inventory system.

Presentations provided an overview of these guidelines as well as elements that can help national inventory teams define priorities so as to avoid the most serious inventory problems. Key messages are:

- There is a continuum between IPCC Guidelines, UNFCCC Guidelines and Guidelines under the Protocol. UNFCCC *Reporting Guidelines* (which include the *Common Reporting Format* and the *National Inventory Report*) refer to IPCC Guidelines for *estimating* GHG inventories (Revised 1996 Guidelines and Good Practice Guidance). Guidelines under the Protocol (i.e. guidelines under Articles 5, 7 and 8) refer to both IPCC and UNFCCC Guidelines.
- Most guidelines provide guidance on how to estimate and report inventories, but some institutional requirements can also be found in the Guidelines under Art. 5.1, such as designating an entity responsible for the whole inventory as well as allocating responsibilities between institutions in preparing the inventory.
- Guidelines under the Kyoto Protocol's Articles 7 and 8 outline what constitutes the most serious inventory problems: submitting incomplete inventory data, submitting estimates inconsistent with IPCC Guidelines, inventory not submitted in time, same inventory problem adjusted² in three subsequent years. This includes problems, such as lack of transparent documentation of data, methodologies and assumptions (including lack of appropriate data storage and archiving systems) as well as inconsistency between emission estimates in base year and commitment period years. It was also highlighted that it may be preferable to produce a submission on time with some gaps than a late submission. Also, it is particularly important to avoid recurrent problems by taking into account recommendations of expert review teams between two inventory submissions.
- Upgrading inventory systems is a very complex and sometimes costly task, therefore it is important to plan inventory tasks according to their effectiveness in avoiding serious inventory problems (as defined above). For instance, making sure that activity data are available/complete may be more important than improving emissions factors, since in the latter case default values are available.
- The establishment of high quality inventories is resource and time consuming in all countries. However, not all areas for improvements involve high costs. While setting up new data collection procedures may involve high costs (in particular if these are not needed for other purposes), allocating clear institutional responsibilities and developing clear administrative procedures (e.g. to allocate responsibilities and document actions undertaken), are not so costly. Also, developing data storage and archiving systems and using basic quality assurance and quality control methods as required by Good Practice may not involve high costs.

² Guidelines under Art. 5.2. define ways to adjust national inventories, if IPCC methodologies have not been followed appropriately.

- The IPCC Good Practice Guidance should be used from the outset while developing a national inventory system. In particular, it provides methods for setting priorities in establishing national systems (through key source analysis, decision trees and quality assurance and control).
- Last but not least, it is crucial that national inventory teams upgrade their national systems as soon as possible to meet the different requirements under the Protocol. First, the sooner they submit inventories according to the Guidelines, the more they will benefit from the international review processes that will help them improve their systems. Second, any delay in setting up national systems means some delay in participating in the mechanisms, since national systems are an eligibility requirement to participate. Parties should take advantage of the ratification process to assess the opportunity cost of not participating in the mechanisms and allocate appropriate resources to developing inventory systems that will allow them to do so.

2.2 National experience in developing inventory systems

The second part of the session was devoted to assessing what is the state of preparedness of national inventory teams in setting up their inventory systems.

According to the latest UNFCCC assessment, by the time of the workshop, six EIT countries (out of 13) had submitted their 2000 inventory in the Common Reporting Format (CRF). Two EIT countries had also submitted a National Inventory Report, while one EIT country had submitted its base year inventory in the CRF.

National inventory experts from EIT countries identified the following problems in developing inventories according to the latest international guidelines:

- While most countries have gained a lot of experience in developing a national inventory and have submitted national inventories for some years, the main difficulty is to set up an inventory system able to produce an inventory annually according to a stable and transparent set of procedures. In other words, there is usually a lack of continuity, both in financing and in the technical work. For instance, a country that has been able to produce a high quality inventory for one year may not be able to do it the year after, due to changes in inventory teams or lack of financing.
- More specifically, most countries lack legislative arrangements to allow the preparation of a yearly-based inventory. In some countries, inventory teams need to apply for funding each year and contract out the inventory work to a private company. While this may result in some cases in high quality work, it gives no guarantee that the system can be sustained over many years. In particular, there is no transparent archiving, which would allow the inventory work to be carried out by other inventory experts, if needed.
- Although EIT countries have usually good national experts, there may be a lack of understanding as regards the priorities in methodological and other work that are needed to meet the requirements under the Protocol and the Convention. Participation in UNFCCC inventory reviews and IPCC methodological work may help in this matter.
- In some countries, the reporting under the Convention (and the Protocol) is not yet well integrated with other reporting systems (in particular CORINAIR), which would allow economies of scale.

- In many countries, legislation is missing to get the appropriate activity data from some sectors. Also, the existing statistical system is changing, which may lead to inconsistency in time series. Other issues related to data confidentiality also raise specific problems.
- In many countries, financial and human resources are simply not sufficient to fulfill all the tasks required to submit an annual inventory according to the latest guidelines. In particular, resources are missing for the initial investment needed to set up an appropriate inventory system, including developing a data storage and archiving system and standard procedures to manage the inventory. In some countries, only one person is working on the inventory.
- In many countries, procedures still have an ad hoc nature. There has been no final decision on which institution has the overall responsibility as well as which are the roles of other institutions in preparing specific parts of the inventory.

In conclusion, although some problems may be related to the technical work itself, most problems seem to be of an institutional nature. It was mentioned in the session that there may be a possibility to finance the inventory work through the Mechanisms, since inventories are needed to participate in the Mechanisms. However, it was also mentioned that such a way to finance inventory systems may not be appropriate, since what is needed is a regular source of financing. Also, such financing is needed now, while financial resources stemming from the Mechanisms might not be available for some years. It is therefore crucial that a clear message be sent to policy makers, that they need to finance inventory systems first, so that their country can benefit from the mechanisms at a later stage.

3. (Domestic framework for) Joint Implementation

Presentations and discussion on Joint Implementation (JI) focused on two aspects: the national system a country needs in order to implement JI, and investors' perspectives on the prospects for and process of JI.

3.1 Institutional requirements for JI

Workshop presenters highlighted the different types of institutions or processes that Parties may need, directly or indirectly, in order to be able to participate in JI³. These are:

- The institutions required by the Marrakech Accords as a pre-requisite to participate in the “Kyoto Mechanisms”. Requirements are different, depending on whether Parties are participating in “track 1” or “track 2” JI;
- Institutions or processes (such as project approval procedures) set up by governments to transfer or acquire ERUs, and to make sure that these ERUs are valid;
- Other institutions that may be involved in verifying the environmental integrity of JI projects, such as “independent entities”; and
- Other processes that may increase investor interest and confidence, as well as public acceptance of JI projects.

Minimum requirements for Parties wishing to undertake “track 2” JI, i.e. to issue and transfer (but not acquire) ERUs are to have calculated their assigned amount and to have a national registry in place. However, if Parties wish to participate in emissions trading or to acquire ERUs (i.e. “track 1” JI) they will

³ A more detailed analysis is included in a background paper to the workshop (Mullins 2002).

also need to set up a national system for estimating greenhouse gas emissions and removals, to have submitted its most recent inventory, and to have provided other “supplementary information” on ERUs, CERs, AAUs and RMUs.

Discussion focused on the institutions or procedures needed to be set up by governments to transfer or acquire ERUs, as many of the institutions needed for mechanisms’ eligibility are already set up or being planned for other purposes (e.g. to participate in emissions trading).

Both donor and host country governments will need to set up institutions in order to approve projects and to transfer or acquire ERUs. Many countries planning to participate actively in JI have already set up some of these structures, such as a JI committee or a JI focal point, have already been initiated or modified from those set up under the AIJ pilot phase.

In addition to setting up institutions, other government actions are needed in order to facilitate investment in JI projects. For example, governments may need to be involved in project design (e.g. by setting project eligibility criteria or baselines) as well as project approval, credit issuance and other parts of the project cycle.

These structures and processes are important in influencing the time and cost needed for approval of a JI project or credit transfer. For example, the host country approval process could be made more predictable and transparent by ensuring that government-approved national criteria for JI projects have been set up and are publicly available. Such criteria would ideally be independent from political interests in order to give the political stability needed for investment in JI projects. However, institutions making decisions on JI are not always politically independent, which can cause problems. One presenter mentioned that co-operation between the host government and donor government changed “overnight” after elections.

Bottlenecks in approving JI projects could be avoided by ensuring that high-level participation is not needed to approve individual projects. Similarly, rules on baselines should not be too complicated or it will discourage investment in JI projects (although the project may still go ahead, but just not with a JI “label”). It is also important that donor-country structures, processes or timelines do not exacerbate pressure on host country systems which may already be under considerable strain. For example, imposing short deadlines on providing calls for interest in potential JI projects should be avoided. Government decisions on how proactive to be in setting an investment framework, which structures to set up and the political independence (or otherwise) of these structures, can therefore exert a large influence on investor interest in JI projects.

Governments, particularly potential host governments, face significant barriers to setting up and running the institutions and processes needed to operationalise JI within a country. Existing difficulties are threefold:

- financial barriers, which results in a lack of institutions and staff to deal with JI issues;
- a lack of rules/legislation on JI, which inhibits setting up a stable investment framework; and
- insufficient knowledge on JI at high levels in government and industry, and often at the technical level (e.g. on baseline-setting).

Nevertheless, some of the actions needed to implement a country’s JI strategy may be simple and/or low-cost. These include actions such as determining responsibilities among participating institutions, documenting procedures and implementing actions in a timely manner.

Presenters and discussants highlighted the divergent interests of different stakeholders involved in the JI process. For example, project developers may want up-front payment to help raise project finance, but

credit buyers want low risks and maximum guarantees, and may therefore be reluctant to pay for credits before they are transferred. (However, it may nevertheless be possible to generate up to 25% of the value of ERUs before they are generated by selling “options” on them.) Regulators want baselines that do not result in a country transferring non-additional credits, whereas project developers want the maximum number of credits. Host country project partners want access to new technology (e.g. via JI projects), whereas their government counterparts need to balance time spent on pursuing JI activities and other policies or requirements for which they are responsible.

3.2 Prospects and process for JI

Presentations focused on experience with JI-type transactions and the JI “market”, and views on how to make JI projects more investor-friendly.

The current market for emission credits was characterised as three-pronged:

- There is a pre-compliance market, where credits are not related to a specific national programme, do not need government approval to be issued and are used for voluntary emission reductions undertaken prior to 2008, or in countries that are not Parties to the Kyoto Protocol;
- In national compliance markets, governments, e.g. in the UK and Denmark, have set emission caps and the framework for acquiring and transferring credits at a national level before the start of the Kyoto Protocol’s first commitment period; and
- “transitional GHG markets”, where agreements are made to transfer or issue emission credits from 2008 that are planned to be used for compliance purposes in the Kyoto Protocol’s first commitment period, such as in the Dutch ERUPT scheme.

The current “market” is in a transitional period from voluntary or pre-compliance markets to mandatory credit markets.

Presenters from Annex II countries and companies highlighted their likely demand for emissions credits, and the potential cost-effectiveness of credits from JI projects, which may be many times cheaper than domestic emissions reductions. However, when assessing the likely market for JI, as compared to CDM or emissions trading, the importance of looking at the broad picture was stressed. The more advanced stage of rule-making for CDM projects, and the ability to earn credits before 2008, was felt by some participants to make CDM a more attractive investment than JI. For accession countries, the EU trading directive (as well as tightening environmental legislation) may reduce the potential for JI projects, as it may be difficult to set up JI projects in areas which will subsequently be covered by the trading regime.

Perhaps surprisingly, much of the discussion focused on whether or not JI projects were needed, as there is a potential conflict of interests between key stakeholders operating at different geographical levels. In some potential host countries, undertaking JI projects may create extra work for governments when the national government does not “need” JI in order to comply with commitments, although undertaking JI projects could be used to help increase “hot air”. However, investments in JI projects would benefit local entrepreneurs, and potentially also the local environment and community. Ways of increasing synergies between national and local stakeholders are needed.

Both presenters and discussants highlighted that JI is “heavy” compared to emissions trading. Moreover, the risks associated with JI were felt to be significant and thus an important factor in holding back the JI market. In addition to the risks run by “normal” projects, JI projects face other risks:

- will a project starting now in an EU accession country be rendered non-additional by 2008 because of environmental legislation yet-to-be introduced?
- will the expected number of credits be generated? What is the likely credit revenue?
- will credits be delivered to the buyer?
- who is liable if credits are not delivered?

Presenters also highlighted that delays in implementing agreed projects could be significant - and that, in particular, power purchase agreements for JI projects that generate electricity had proved difficult to agree.

3.3 Good practice for JI

Although there is an international framework for JI projects, there is also significant leeway for national governments in setting up the institutions and processes needed for JI at a national level. How these institutions are set up can influence investor interest in JI. Suggested “good practice” at the national level would be:

- Develop a coherent strategy *vis à vis* the mechanisms, and JI’s place within this;
- To set up one focal point for investors;
- To set up clear project approval criteria and screening procedures; and
- To ensure consistency in project approval.

These actions will help reduce the risks associated with JI projects and thus facilitate investment.

4. National registries

The session was intended to provide a better understanding of the roles of national registries, and of key international requirements and future work at international level. It also discussed the national experience to date in setting up national registry systems, and the priorities and steps needed to set up these systems at national (or regional) level.

4.1 Roles of national registries and key international requirements

The national registry is the other main national monitoring system that Annex I Parties need to establish under the Kyoto Protocol, alongside the national inventory system. As for the latter, it is an eligibility requirement to participate in the flexible mechanisms.

According to the guidelines adopted in Marrakech, a registry is a “standardised electronic database” for recording and tracking of units as they are defined in the Kyoto Protocol: Emission Reduction Units (ERUs), Certified Emission Reduction (CERs), Assigned Amount Units (AAUs) and Removal Units (RMUs). Recording and tracking these units is needed, since these units can be issued, transferred and/or acquired by Annex I Parties to the Kyoto Protocol. In tracking and recording units, registries facilitate –and promote transparency with regard to- transactions carried out through the flexible mechanisms.

Another main role of registries is to assist in determining a Party’s compliance with its Kyoto Protocol obligations. A registry allows a Party to retire units in a specific retirement account. After the end of the commitment period, a Party is in compliance if the number of units retired is at least equivalent to its GHG emissions during the commitment period (as estimated in its national inventory).

Through these functions, national registries represent a key component of both the flexible mechanisms and the compliance system under the Kyoto Protocol. Guidelines adopted in Marrakech provide minimum requirements on the design and contents of national registries. In addition, the Marrakech Accords have established two other registries, namely the CDM registry (to be operated by the CDM Executive Board) and the transaction log, which will ensure the transaction integrity by conducting automated checks on transactions.

Since national registries need to be connected to each other, future work on registries at international level will mainly consist in setting minimum technical standards to “ensure the accurate, transparent and efficient exchange of data between national registries, the CDM registry and the transaction log”. Establishing the CDM registry and the transaction log will also require work at international level.

As far as national registries are concerned, however, each Party has the responsibility of setting one up. In this perspective, the discussion focused on the distinction between the international needs as explained above (which are fairly limited) and the domestic ones. While they should conform to minimum international standards, registry designs may vary with the domestic policy choices with regard to participation in the mechanisms. For instance, a Party may decide not to participate in the mechanisms, in which case it will still need a registry, albeit a very simple one. A Party may wish to participate in the mechanisms, but only allow the government to trade, in which case the registry will only include government accounts. Finally, a Party may wish to allow private entities to trade internationally, in which case entities will have their own account(s). Registry designs may also vary with how a country intends to implement the Commitment Period Reserve. Some participants also argued that it could also be a planning tool for Parties to provide confidence that it is likely to be in compliance with its obligation at the end of the commitment period.

The design of the registry will also depend on the domestic systems that will be set up for Joint Implementation and/or emissions trading (see sections 5 and 3). In the latter case, registries may be used to track transactions between entities in a domestic trading market (connected or not to the international market). It could also be used to ensure that entities are in compliance with their domestic obligations. Such additional functions might require a more complex system. While there are fairly simple technical solutions for building a registry, it is important that Parties define their own policy choices before a registry can be built.

4.2 National experience and priorities for action

Since Parties are required under the Kyoto Protocol to maintain registries, they must start to develop them quite soon. There is, however, very little experience in this field, in particular in EIT countries. At the time of the workshop, only two Annex I countries (France and the UK) had designed (or started designing) a national registry. In addition to addressing policy questions as mentioned above, Parties need to decide how they will set it up. The participants discussed a few specific issues that also have cost implications:

- Parties need to decide whether to develop their own registry or maintain their registry within a consolidated system including other national registries, which would presumably be a cheaper option. This was still an open question for most countries, but some small countries indicated that this option was preferable.
- Parties also need to decide whether they want to adapt an existing system (e.g. the French registry based on the French Central Securities Depository) or create a new system (e.g. the UK system). Creating a new system is likely to entail higher costs, but it may also be tailored more easily to the specific needs of climate policy.

- A decision also needs to be made whether the management of a registry should be private or public. Private companies could easily develop and run the system, since technical solutions already exist. However, Governments might want to retain control over the operation of such a registry.
- Whatever option is chosen, setting up and maintaining a registry will entail initial investment costs. Estimates of these costs vary widely. However, a participant from industry mentioned that it could cost at the very least more than 500 000 EUR for a country to set up its own registry. This might pose particular problems to EIT countries, which already face other costs related to the implementation of the Kyoto Protocol (e.g. setting up of national inventory systems).
- A related question that also needs to be addressed is who will bear the cost of the registry. Usually, there is a fee for participants in the system as well as a fee per trade. However, Parties may want to allow the free use of the system, at least in a start-up transitional period (as in the UK).

5. Domestic Emission Trading Systems

Workshop presentations addressed three main issues: the proposal for an EU Trading Directive, work setting up an emissions trading scheme in the Czech Republic, and a broker's view on the emerging emissions "market" and emissions trading system design.

The discussion addressed first the design of the proposed EU trading scheme and its implications for accession countries. It also considered the importance of a domestic emissions trading scheme in a country's climate change policy, in particular in EIT countries. Finally, it focused on actions that governments need to take in order to set up a functional domestic emissions trading scheme.

5.1 The proposed EU trading scheme and the specific circumstances of EIT countries

The introduction of emissions trading requires political will to make a situation of abundance, (i.e. where the number of AAUs exceeds likely business-as-usual emissions) as in many EITs, one of scarcity. This could be done if national governments capped emissions from the industry sector, and establish GHG mitigation policies and measures for all other sectors, including households and transport.

While domestic emissions trading is not regulated by the Kyoto Protocol, the EC proposal for an emission trading Directive starts addressing implementation questions related to domestic trading. With the inclusion of accession countries and the European Economic Area in this framework, it would cover 28 of the 39 Annex B countries, including most EITs. It may be advisable for countries who have not yet set up a domestic emissions trading scheme, to ensure that any future national system is compatible with existing systems and benefits from experience already gathered from "early movers".

Problems of compatibility could of course arise if a country wants to include more or fewer sectors in its domestic regime than is covered by the EU regime. Discussions highlighted that if EIT governments had the impression that they could not fulfill all requirements, exemptions or a transition period would have to be negotiated before joining the EU. If no exemptions are negotiated, the full Directive will enter into force. These countries would then have to use other policies and measures to avoid distortions just as other EU Member states. As the EU Scheme will be valid for EIT countries that join the EU in future, governments of these EITs might want to consider active participation in the design of this EU scheme, i.e. before their accession.

Discussions also highlighted the differences between EITs. Some EITs are already in compliance with their emission commitments under the Kyoto Protocol, and will stay in compliance in spite of projected economic growth. However, this does not necessarily mean that the economy is growing in a climate friendly way: many EITs have a fairly high CO₂ intensity. Industry in these countries is generally not addressing climate change issues, and the introduction of a stringent cap for a domestic ET system is politically difficult. The ET scheme analysed for the Czech Republic therefore suggested setting the domestic emission reduction target at minus 20%, still allowing for 3.5% industry growth, as opposed to their Kyoto target of minus 8%.

Other countries like Croatia or Slovenia will not easily achieve their Kyoto target. Emission reductions will therefore have to be made without hampering economic growth. These countries face a greater challenge and need to take more proactive steps towards reductions. This might include trading.

Increased awareness and education amongst potential stakeholders is needed so that industry decision-makers become aware that emissions trading can be advantageous for them. A domestic emissions trading scheme can help reduce emissions - even in countries that are already in compliance with Kyoto commitments - and so can result in additional revenue in the first commitment period (or later).

5.2 Priorities for action by governments

Discussions outlined the role that a national government could play when establishing a domestic emissions trading scheme. The following actions were identified as necessary:

- Collecting data, including setting up monitoring, reporting and verification rules and guidelines;
- Setting up a national inventory and registry;
- Creating awareness in industry that there is a need for them to prepare for international competition;
- Set a cap (questions to be solved: Which sectors to include? Which gases? Which participation thresholds?);
- Define the “currency” to be traded, e.g. ton carbon dioxide equivalent;
- Set and enforce a high enough penalty.

Presenters concluded that an absolute -rather than relative - cap was more appropriate, as they fit better with the absolute targets allocated to countries under the Kyoto Protocol. However, the effectiveness of such a system would depend on the penalties for non-compliance, and on government willingness to enforce them.

The discussion concluded that governments should keep in mind the need to make regulation efficient, and thus confine it to the essentials. Experience from the UK and EU shows that it is necessary to work in close consultation with industry. In addition, links to other domestic ET schemes should be established from the start, as domestic markets in EIT countries may not be big enough for a viable and efficient stand alone ET scheme at the national level.

In order to generate industry interest in trading, some governments may need to introduce incentives to participate in a domestic trading scheme. Such incentives may also be a crucial point for political acceptance of the DET scheme. The Czech Republic is proposing in its study to introduce incentives to encourage participation in a voluntary ET scheme. The planned incentives could create a significant competitive advantage.

According to the proposed EU scheme, initial allocation of permits may provide limited financial aid to industry. Companies may not be allocated more credits than they need, but allocation according to business

as usual projections is possible. This could be an incentive for EIT companies to achieve easy reductions at low costs and sell these reductions to industries in EU-states that face higher costs of abatement.

6. Capacity-building: issues and initiatives

The session aimed to provide recommendations on priorities in building capacity within EIT countries to establish national systems, based on the assessments made in the previous sessions on the priorities for action. The session also aimed to provide recommendations on how internal and external resources could be used efficiently to meet the capacity building needs of EIT countries and what is the role of different actors.

The lead presentation identified the challenges faced by EIT countries in setting up national systems and assessed current capacity building efforts by donor agencies. It identified priority steps for the EITs in building internal capacity, such as defining a clear division of responsibilities among institutions, developing strategies and action plans, launching legislative processes, as well as involving the private sector. It also identified priority steps for the donor community, such as more strategic, but flexible and longer-term assistance, co-ordination among donors, possibly through a clearinghouse for CB projects, as well as assistance to EIT to help them prepare grant applications.

The discussion that followed also highlighted the following priorities for capacity building:

- A key priority is to help EIT countries access Track 1 for Joint Implementation, that is to help them set up a national inventory system. Current capacity building assistance seems to target the flexible mechanisms directly, but it is important to consider the sequence: inventory systems need to be set up before Parties can participate in the mechanisms. Some capacity building initiatives that can target inventories have been suggested, such as helping countries set up data storage systems and participate in international reviews. Setting up inventory systems raises, however, a more general question for governments of how to finance information provision. Of particular interest is whether revenues generated by the flexible mechanisms can somehow be channelled back to the preparation of inventory data.
- A key obstacle to an effective climate policy seems to be the shortage of staff in EIT governments. Participants made the following suggestions, which address directly or indirectly this specific bottleneck:
 - Create new financing instruments (e.g. earmarking funds from the mechanisms to pay for staff)
 - Look at new models, such as public/private partnerships. The need for government staff is reduced if there are other stakeholders who are well trained and can influence the process, such as NGOs. Involving NGOs can also help alleviate the general distrust in EIT countries towards flexible mechanisms. These could include NGOs in the business community including private consulting firms who can help governments do the work.
 - Shift focus to regions/municipalities, where existing staff can be trained; or enhance regional co-operation (e.g. on inventories), thereby avoiding duplication of efforts in each country.
 - Find ways to convince higher officials to increase resources allocated to climate change. Climate change may be mentioned as a priority at the higher policy making levels, but in practice the policy-making system can be very rigid. Inventive ways need to be found to

increase awareness within the political system of the needs for changes in institutions. This might include the use of the media, setting up higher level consultative groups (which include the business community) or independent institutions that can advise and convince senior government officials of reforms needed, and increasing awareness of climate change at all levels of society.

- Focus not just on increasing staff, but on training them to acquire some skills that may be overlooked but that are specifically needed in the area of climate change in general and the flexible mechanisms in particular. This includes the capacity to prioritise/plan strategically or the capacity to close deals (with host and donor country businesses).
- By contrast, addressing a shortage of funds from the international community for capacity building is less obvious. Such funding may exist, but may not be well prioritised. There also seems to be a lack of mechanisms to pull together these means for specific projects. Suggestions in this area included: donors working more together; setting up a clearinghouse where information on funds and projects can be found; setting up particular units in governments or national focal points, which are in charge of channelling the information on funding and projects and keeping the institutional memory.

7. Glossary

AAU	Assigned Amount Unit
AIJ	Activities Implemented Jointly
CDM	Clean Development Mechanism
CER	Certified Emission Reductions (from projects undertaken under the Kyoto Protocol's Clean Development Mechanism)
CO ₂	Carbon Dioxide
DET	Domestic emissions trading
EIT	Countries with Economies in Transition
ERU	Emission Reduction Unit
ET	Emissions trading
EU	European Union
IEA	International Energy Agency
IETA	International Emissions Trading Association
IPCC	Intergovernmental Panel on Climate Change
JI	Joint Implementation
KP	Kyoto Protocol
OECD	Organisation for Economic Co-operation and Development
RMU	Removal Unit (as laid out in the Marrakech Accords)
UNFCCC	United Nations' Framework Convention on Climate Change

Part II.

Joint Implementation Institutions: Implementing JI at the National Level

Executive summary

Objectives

This paper provides an overview of key institutional issues related to JI project implementation, focusing on what governments will need to do. The paper also describes examples of good practice for JI processes and institutions and establishes an analytical framework for examining institutional issues.

This paper has been prepared for the workshop on “*National Systems for Flexible Mechanisms: Implementation Issues in Countries with Economies in Transition*” in Szentendre (May 13-15). It aims to provide a basis for delegates to consider the feasibility of implementing various institutional requirements given their country-specific context.

Institutional issues related to JI implementation

Governments of all Annex I countries will need to make decisions on institutional matters in order to attract inward JI investment. It is important for countries that plan to host JI projects to establish the institutional basis for this well before the 2008-2012 Kyoto commitment period begins. Already, some countries are gaining experience with JI-like programmes such as the UK, Bulgaria, Poland and Czech Republic, and programmes such as the Dutch ERU-Pt and Prototype Carbon Fund are driving the development of expertise for JI projects. *Box 1* summarises government institutional requirements for JI which are discussed in *Section 1* of this paper.

Box 1 Summary of government requirements

Project stage	Institutional implications:
Project Design	<ul style="list-style-type: none"> • establish eligibility requirements (identify sustainable development needs, investment priorities) • authorise legal entities • decide baseline rules
Validation	<ul style="list-style-type: none"> • accredit domestic OEs
Approval/ Registration	<ul style="list-style-type: none"> • decide government (or delegated) authority to approve/register the project • set up systems for approval and registration
Monitoring	<ul style="list-style-type: none"> • decide standard measurement methods and reporting formats;
Verification	<ul style="list-style-type: none"> • accredit domestic OEs
Certification	<ul style="list-style-type: none"> • accredit domestic OEs
Issuance	<ul style="list-style-type: none"> • procedure for issuing ERUs • establish and run the national registry

Source: CDM project cycle and ERM

Many of these institutional requirements derive from Kyoto Protocol requirements that aim to ensure environmental integrity. These include setting appropriate baseline rules, verification by independent entities, and transparency in providing public information at appropriate stages. Others are simply processes that are required in order for the government give validity to emission reductions, which are a new commodity that only exists by government remit. Some of these institutional elements can greatly affect investor confidence and transaction costs. For example clearly defined requirements for JI projects, standardised processes, and simple streamlined procedures will enhance investor willingness to engage in JI projects. All of the institutional issues in *Box 1* are discussed in *Sections 1.2* and *1.3*.

Examples of current practice

Several CEE countries are already pursuing emission reduction projects with OECD country partners. JI Projects are currently already being implemented under existing schemes such as the Dutch ERU-Pt Programme, the Prototype Carbon Fund of the World Bank, and through agreements with Annex I Governments (e.g. Norway). The Czech Republic, Poland, and Bulgaria already have experience of JI-like projects under these programmes. *Section 2* of this paper summarises elements of good practice that have been documented from experience with JI-type programmes to date. The emphasis is on certainty for investors, providing a one stop shop or focal point, and well-defined and streamlined procedures for project eligibility and baselines.

Analytical framework: Gap Analysis

Governments of countries that wish to host JI projects need to decide their own organisational, institutional and legislative arrangements for JI projects and establish processes for projects in order to attract inward investment.

While every country has unique systems and will require its own solution to the institutional requirements for JI, a common analytical framework within which to identify needs provides a basis for considering the issues.

The analytical framework proposed is very simple, and has been used successfully to develop institutional strategies in several countries:

- Identify what functions have to be carried out (i.e. identifying what, not how);
- Identify existing institutions (organisations) that could carry out the functions and existing legal backing that could be used or amended;
- Identify the gaps which show where new institutions and legislation may be needed.

1. Institutional issues related to JI

1.1 Introduction

1.1.1 Kyoto Protocol context

Once entered into force, the Kyoto Protocol will provide the legal basis at the international level for JI. However, for JI to be operational, policies and institutions will need to be established at the national level. Already, JI projects are being developed in central and eastern European countries in transition and other Annex I countries. Some governments are implementing early project investment mechanisms for emissions reductions under domestic programmes. Through these early initiatives, experience is being gained on what will be required to administer JI effectively at the national level.

There are two “tracks” to JI, with different institutional implications at the national level:

- The first “track” is where a host Party that meets the eligibility requirements (see Annex 1) defines and uses its own approaches for establishing project baselines, verifying emission reductions and allocating ERUs.
- Under the second “track” the JI supervisory committee (an official international body) sets international procedures for baselines, verification and other procedures (see Annex 1 for details).

The Kyoto Protocol and associated official documents such as the Marrakech Accords provide many indications of processes or functions that are required and of some of the key institutions that will be needed for JI (such as registries and Designated Operational Entities). There is a transition period at present, however, as the JI Supervisory Committee will resolve many of the details for track 2 JI in due course. Governments that are confident that they will use track 1 JI can create their own rules and processes for project approval, baselines, and crediting but will want to be sure that they are not establishing systems with baselines that lead to the export of non-additional ERUs.

1.1.2 Institutional issues

“Institutional frameworks”, defined broadly, can include processes or functions, organisations that carry them out, and mandates (such as legal backing) for them. Governments will need to make decisions on institutional matters in order to attract inward JI investment. It is important for countries that plan to host JI projects to establish the institutional basis for this well before the 2008-2012 Kyoto commitment period begins. Projects starting as of the year 2000 can be eligible as JI projects, although ERUs are only issued for emission reductions that occur after the year 2008.

Box 2 summarises the government institutional requirements for JI. These requirements are discussed in more detail below.

Box 2 Summary of government requirements

Project stage	Institutional implications:
Project Design	<ul style="list-style-type: none"> establish eligibility requirements (identify sustainable development needs, investment priorities) authorise legal entities decide baseline rules
Validation	<ul style="list-style-type: none"> accredit domestic designated operational entities (OEs)
Approval/ Registration	<ul style="list-style-type: none"> decide government (or delegated) authority to approve/register the project set up systems for approval and registration
Monitoring	<ul style="list-style-type: none"> decide standard measurement methods and reporting formats
Verification	<ul style="list-style-type: none"> accredit domestic OEs
Certification	<ul style="list-style-type: none"> accredit domestic OEs
Issuance	<ul style="list-style-type: none"> procedure for issuing ERUs establish and run the national registry

Source: UNFCCC presentations on CDM project cycle and ERM

Many of these institutional requirements derive from Kyoto Protocol requirements that aim to ensure environmental integrity. These include setting appropriate baseline rules, verification by independent entities, and transparency in providing public information at appropriate stages. Others are simply processes that are required in order for the government give validity to emission reductions, which are a new commodity that only exists by government remit. Some of these institutional elements can greatly affect investor confidence and transaction costs. For example clearly defined requirements for JI projects, standardised processes, and simple streamlined procedures will enhance investor willingness to engage in JI projects. These sets of institutional issues are discussed in *Sections 1.2* and *1.3*.

1.2 Institutions related to environmental integrity

1.2.1 Baseline rules

A project baseline should reflect the emissions that would occur in the absence of the project. *Box A.2* in Annex 1 summarises the requirements in the Marrakech Accords for JI baseline setting. To allow domestic or international legal entities to participate in JI projects in their country, governments will have to decide on rules for JI project baselines. The baseline for a project serves as the basis for claiming emission reductions units that can be sold and it is important that any export of ERUs is matched by real emission reductions. The baseline also affects the commercial attractiveness of a project to investors. If the baseline is too tough, investors may be discouraged unnecessarily, but if too lenient, then the environmental objectives of the project and hence of the Kyoto Protocol may not be met.

Governments also need to set criteria relating to baselines and environmental additionality so that project proponents are clear from the outset whether their project might earn ERUs. Arbitrary or flexible rules that vary from project to project will create substantial uncertainty regarding whether projects will be objectively approved and the emission reductions independently certified. These uncertainties increase associated project risks, which are likely to decrease the attractiveness of JI. It is important for

governments to be able to set realistic and fair emission targets and project baselines. It is also obvious from experience that governments (if they are eligible for track 1) have significant leeway to use baseline rules as a policy tool, for example to encourage projects in some areas that have other benefits.

The decision on which countries meet the requirements for track 1 and so will be eligible to decide their own baseline rules is scheduled for 2007. The safest approach, therefore, is to adopt the "Track 2" international rules for JI projects as soon these are decided by the JI Supervisory Committee. In the meantime, it is important to adopt effective processes that are simple for investors to follow and environmentally sound in terms of additional emission reductions. Countries wishing to attract JI investment in the next few years may need to consider providing a government undertaking or insurance against non-validity of ERUs based on national requirements that are set before track 2 rules and country eligibility for track 1 are clear.

There are advantages even for countries that are eligible for track 1 to follow track 2 baseline rules as these will create internationally consistent rules for baselines, thus avoiding the concern that countries with less stringent baseline rules will attract more investment. In addition, use of the JI Supervisory Committee rules, together with the monitoring and verification requirements, will avoid any risk that ERUs sold from projects will be subject to the Commitment Period Reserve constraint.

Box 3 illustrates the types of government decisions required that are related to JI baselines.

Box 3 Examples of government decisions on JI baselines

Establish baseline rules

- Decide eligible sectors or project types;
 - Decide on rules for project boundaries (including how to address leakage of emissions outside the project boundary and outsourcing, inclusion of direct sources only or indirect sources as well);
 - Decide on methods for baseline evaluation (for example, as for the CDM, baseline methods could include an estimate of existing, actual or historical emissions for the activity; or emissions from a "benchmark" technology that would normally be used; on a project-specific basis and/or using a multi-project emissions factor; taking into account relevant national and/or sectoral policies and circumstances sectoral reform initiatives, local fuel availability, power sector expansion plans, and the economic situation in the project sector);
 - Decide on the duration of the baseline (whether it should be reviewed periodically and revised upwards or downwards if certain conditions arise).
-

Source: UK govt TOR for project baselines and ERM

1.2.2 Monitoring and Reporting methods

Actual emissions once the investment is made are monitored over the lifetime of the project. Quantification of emission reductions involves comparison of annual baseline emissions with annual project emissions (once the project investment has been made) calculated using the same methodology. Standard methods for calculating emissions are already available e.g. Inter-governmental Panel on Climate Change (IPCC), Dutch ERU-Pt, Prototype Carbon Fund, and World Business Council on Sustainable Development (WBCSD) all of which follow the same basic methods.

Governments will need to decide on whether to require a standard Monitoring and Verification Protocol (MVP) for certain project types and whether project investors can submit their own MVPs for government approval on a case-by-case basis as is done under the PCF. As well as MVPs themselves, guidelines on the country's JI provisions are helpful for the independent verifiers who verify emissions reductions from projects.

Box 4 summarises government decisions that are related to monitoring and reporting.

Box 4 Examples of government decisions on JI baselines

-
- Decide on data sources that project investors should use and data quality requirements (e.g. transparent approaches, assumptions, methodologies, parameters, data sources and key factors).
 - Decide on methods for monitoring emissions (e.g. in such a way that ERUs cannot be earned for decreases in activity levels outside the project activity or due to force majeure; taking account of uncertainties and using conservative assumptions).
 - Decide on specific MVP for different gases and sources, or allow case by case submission of project specific MVP for approval.
-

1.2.3 Accredited Designated Operational Entities

Governments will also need to decide on the requirements and process for accrediting independent entities. In most countries, this is done through a national accreditation body that is established for accreditation on a wide range of issues including ISO 14000. It is important to develop local capacity for baseline and environmental additionality assessment, project validation, verification and certification. National institutions and private sector firms should be designated as operational entities provided they demonstrate relevant expertise and resources. Existing local operating entities financial and accounting audit, environmental verification and certification, and energy audit could potentially be accredited as operational entities for JI. National certification processes will enhance capacity in the host country and generate business for domestic firms.

Verification can only be done effectively by experts with technical knowledge of the sector or type of project. An energy sector project may require someone with an appropriate engineering background while a sinks project would require someone with a sound scientific understanding of carbon sequestration estimation techniques. To generate confidence, verification must be undertaken by institutions that are respected and whose independence from the project is beyond question.

1.2.4 Transparency of information; public and stakeholder participation

The Marrakech Accords require public participation and stakeholder processes for JI. Public participation improves the likelihood of successful project implementation by avoiding costly delays, legal disputes, and negative publicity. Projects that are not supported by local communities are far more likely to face implementation problems and far less likely to achieve their intended outcomes. From the standpoint of all JI stakeholders —local communities, investors, and public officials within governments and international bodies —public participation promotes accountability and good governance. Timely disclosure of information reduces the likelihood of corruption or collusion and so can improve the overall performance of the JI mechanism. An open, transparent process will improve environmental integrity by allowing NGOs and local groups to provide any vital information that may have been omitted by, or unknown to, project proponents. Such a process can increase the credibility of project baselines. Monitoring, verification, accreditation and approval processes for JI all require stakeholder comments under the Marrakech Accords.

1.3 Institutions related to investor confidence

1.3.1 Define project eligibility requirements

Each country will need to consider its own eligibility requirements for JI. A country that hosts a JI project will determine whether it is in line with its economic and environmental (or sustainable development) goals. Thus a process is needed to identify the types of projects that the government considers appropriate to be addressed under a JI framework or that the government wishes to encourage. Consideration could be given to a wide range of environmental, economic and social issues in setting the rules for JI projects in a country. Governments will need to develop national rules, guidelines and criteria that are consistent with national priorities for determining whether JI project activities are eligible. Governments may decide to prioritise project types or locations that are preferred, for example for local economical, environmental or social reasons.

Governments could decide to limit JI projects to certain sectors, or could decide to allow any activity to be defined as a JI project if validation is provided by independent third-party verifiers. The decision will often depend on the difficulties of establishing baseline rules for certain types of project. For example a country may decide that methane from ruminant animals is too uncertain for appropriate baselines to be established.

Whatever is decided, investor confidence will be enhanced if the rules are clear and well communicated. Any uncertainty over project eligibility, or delays in determining this, will add to project transaction costs. Clear and operational selection and approval criteria integrated into local and national development objectives will help project proponents to decide whether to carry out a project under JI.

1.3.2 Authorise legal entities

Approval/registration and issuance are processes that can greatly affect the transaction costs for project proponents. It is likely that eligibility for legal entities to participate in JI will be given at project approval stage. If a project is acceptable the approval process should give the project proponent the authorisation to carry it out and gain any ERUs that are issued from it. There may be a need for each country to examine whether any legal provisions are required to underpin the approval process.

It is important to recognise that legal entities in transition countries will be both project proponents in their own countries and also might invest in projects in other countries. Similarly, non-transition countries will be looking to attract inward JI investment as well as authorising their own legal entities to invest in transition countries. Entities will need government authorisation to engage in processes that lead to the transfer of ERUs, both exports and imports. This is likely to be achieved through the rules for project eligibility and baselines. In other words, in normal circumstances, if a project is approved as meeting a country's JI project rules then exports of the ERUs to other countries by the entity that owns them are automatically "authorised".

One key issue for investor confidence is that governments must carry out certain responsibilities to remain eligible to participate in JI in order for legal entities to participate. Governments must ratify the Kyoto Protocol, and provide an annual inventory and supplementary information as required. If a country loses its eligibility to participate in JI or hits its Commitment Period Reserve limit, then legal entities in that country will also be prevented from selling ERUs to other countries. Governments must decide whether to establish legislation to prevent the sale of ERUs if the country is under international restrictions of this nature. An alternative could be for a government to commit to buying ERUs to balance any ERU exports

by industry – which would give industry greater confidence in JI investments but leave the government open to the cost of underwriting industry ERU exports.

1.3.3 Government approval and registration processes

The government in the project host country should be able to provide all potential investors with clear and up-to-date information about their procedures, project eligibility criteria, decision-making authority, monitoring requirements, reporting formats, information requirements and approval processes. These decisions should not be left open for ad-hoc decision making. Institutional procedures should be streamlined as much as possible, for example by establishing a “one-stop shop” for investors. The organisational structure of the JI process of the country and the mandates of the authorities should be clear and made available to ensure efficient and transparent JI process.

Effective communications between government agencies, the private sector and foreign investors is important. A central co-ordinating authority (national focal point) is required under Article 6 and this could be the “one-stop shop” agency referred to above to help to avoid overlap of functions, minimise transaction costs for project proponents and enhance continuity and efficiency. The focal point institution will typically require inputs or participation from a range of government agencies. The focal point could be formally assigned to be responsible for various aspects of JI administration such as project approval, registration, issuance of ERUs and for other functions such as raising awareness of the public, private sector firms and investors, and provide information on its activities, rules and procedures, and answer to requests for information.

Interdepartmental JI-Units can be formed as executing agencies of the JI programme (e.g. in Romania and Bulgaria this approach is used). The JI unit is guided by a steering group with representatives of all relevant departments.

The national focal point institution could have a range of responsibilities, such as:

- co-ordinate with domestic project implementing entities and investors on project development and implementation;
- approve monitoring and verification protocols;
- support technical development of baseline;
- oversee the overall project development and co-ordinate with project proponents on proposal details, baseline methodology and project monitoring plan;
- co-ordinate with other JI implementing agencies at different stages of the project activities;
- authorise the accreditation process for domestic operational entities;
- facilitate public participation;
- maintain an up-to-date list of approved JI operational entities and JI projects in the country (to be made available to the secretariat and the public);
- establish a public participation process for stakeholders who are likely to be affected by a CDM project;
- manage information marked proprietary or confidential by project participants so as not to disclose it without consent.

1.3.4 Process for issuing ERUs including national registry

International transfers and acquisitions between Parties to the Kyoto Protocol will be made through national registries. These will be standardised electronic databases in each country containing common data elements. Any domestic or foreign firm that wishes to receive ERUs from a project will also have to

have accounts in the national registry of the host country or else buy their ERUs from an account holder in that country and have them transferred to their own account in their country.

Registries will be the main vehicles for proving the validity of ownership of permits as they will only exist in electronic form in a registry account. Registries will, at a minimum, need to:

- record “assigned amount” held by the government and emission permits held by companies;
- record transfers and acquisitions;
- make transfers between accounts quickly;
- provide a publicly accessible interface;
- not disclose information marked proprietary or confidential by project participants without consent.

To establish the registry, governments can either use registries that have been developed by other countries (if these are available as seems likely), or commission their own registry, which would enable country specific features to be added. The capital equipment required is a secure, stand-alone computer. The operational requirement is for staff to enter data on ERU transfers – possibly daily, depending on the volume of transfers. Slovakia’s registry cost 5 000 USD for software and hardware, 4 000 USD in the first year for operational costs, and 2 000 USD for each subsequent year. ⁽⁴⁾

1.3.5 Contractual and financial institutions

Strong contractual and financial institutions are another key element that enhances investor confidence. A stable and favourable investment climate is needed for both domestic and foreign investors. Established property rights over emission reduction units as well as the system of the contract enforcement can significantly increase the willingness to invest in and insure the JI projects.

Dispute resolution procedures are also needed. For example, disputes could arise between certifying entities and investors or environmental NGOs; or between investors, project sponsors and credit buyers, on the one hand, and government, on the other, over host country regulatory or other decisions that allegedly have prevented an entity’s ability to earn credits from a project.

In addition to any international investment agreements, individual project agreements are likely to govern the legal relationship between the host and a foreign investor. These contracts, which may involve a range of actors, will set out the parties’ obligations to ensure the project’s performance. These contracts will spell out the terms upon which the credits resulting from the project will be transferred or shared between the entities (possibly including the government). This type of contract could complement or, in some circumstances, override the normal property rights established under government policy. Well-negotiated agreements, expressed in clear terms, can set out each participant’s legitimate expectations and prevent misunderstandings and disputes from arising.

Governments will need to ensure that the legal infrastructure exists to support the establishment of institutions and processes for JI projects. Legal issues may arise concerning the determination of share of ERUs that should be available for export based on beneficial equity between the host country and the investor; the responsibility for administration of JI projects to ensure the roles responsibilities of agencies in directly involved in JI projects are clear; the requirement for stakeholder or public participation in JI processes; and regulations that balance the need for transparency in implementing JI project with business

⁴ Presentation by Gabriela Fischerova, Ministry of the Environment, Slovak Republic, to the Annex I Expert Group, May 2002.

confidentiality. Legislation that provides a clear basis for investment in general will also encourage JI investment.

1.4 Private sector requirements

Private sector entities are key players in JI. They will participate as investors or co-investors, project proponents and operational entities. Companies, as well as governments, require institutional capacity to carry out their JI activities that in some cases will go beyond their normal capabilities. *Box 5* summarises some obvious private sector requirements at different stages in the project cycle.

Box 5 Summary of private sector requirements

Project stage	Institutional implications:
Project Design	<ul style="list-style-type: none"> • awareness of eligibility requirements and baseline rules • Identify GHG reduction opportunities or “projects” • ascertain whether these projects will be eligible for crediting under domestic rules • ability to negotiate ERU sharing with joint venture partners • prepare project design document
Validation	<ul style="list-style-type: none"> • DOE capacity to carry out validation.
Approval	<ul style="list-style-type: none"> • Obtain approval by the all of the Parties (i.e. governments) involved.
Registration	<ul style="list-style-type: none"> • awareness of government registration procedure
Monitoring	<ul style="list-style-type: none"> • technical capacity to monitor emissions and report to govt • ability to establish an appropriate baseline and monitoring plan • knowledge of MVP requirements;
Verification	<ul style="list-style-type: none"> • project proponent must select and contract verifier • prepare and submit to an accredited independent entity a report in accordance with the monitoring plan on reductions • DOE capacity to carry out verification
Certification	<ul style="list-style-type: none"> • DOE capacity to carry out certification
Issuance	<ul style="list-style-type: none"> • communication with the national registry • determine strategy for selling ERUs (price, timing)

*DOE: designated operational entity

Several of these private sector requirements would benefit from government sponsored institution building including awareness raising, training and information provision. The government could assist in determining project baselines by providing relevant information and/or projections for each project and by preparing a Project Developers Guide. Many such resources could usefully be developed at the regional level or by the Annex I Expert Group as the same advice will be relevant for projects in different countries.

One way to achieve efficient flow of information is to use the national focal point as a “one stop shop” for information although this is unlikely to be sufficient to make the private sector broadly aware of the fact that they could develop JI projects, or gain accreditation as independent operational entities for JI. The global market for JI will spawn a new set of service industries. To maximise economic gains from the JI, it is important to develop local expertise in these new areas of economic activities. At present the number of local JI experts in many countries very low. There is a need to increase the local consultancy base to avoid the risk of large chunks of investment to support project development going to foreign consultants and agencies.

There is no need for the government to establish the market mechanisms that make transactions among participants possible (other than the registry). Brokers, exchanges and other market makers already exist in the private sector and are quick to see the new opportunity that a new commodity offers for their business.

2. Identifying good practice

JI is already driving project investments in central and eastern European countries where large quantities of emission reductions can be obtained from very low cost investment. Several CEE countries are already pursuing emission reduction projects with OECD country partners. JI Projects are currently already being implemented under existing schemes such as the Dutch ERU-Pt Programme, the Prototype Carbon Fund of the World Bank, and through agreements with Annex I Governments (e.g. Norway). The Czech Republic, Poland, and Bulgaria already have experience of JI-like projects under these programmes. Current experiences with JI under various programmes are summarised in Annex 1. Elements of good practice suggested by this experience are:

- minimise bureaucratic hurdles and keep transaction costs low;
- be pragmatic and gain practical experience with a real projects and “on-the-job” training (e.g. through ERU-Pt, PCF projects);
- one window approach – it should be clear where investors and project proponents need to go to inquire about JI processes and rules and to seek assistance;
- clear approval criteria and screening procedures to reduce uncertainty for project developers (criteria could be differentiated across project categories);
- set up a resource centre - JI requires specialised technical information. The focal point institution could provide background materials, internationally approved manuals for baseline studies and monitoring procedures. It can also keep short lists of JI consultants and Operating Entities active in the country;
- NGOs, research institutes and local consultants can play an important role in developing and evaluating project procedures (baselines, etc.);
- the provision of training and on the job training programmes, workshops, seminars;
- co-ordination between departments;
- technical training e.g. on monitoring, validation, verification techniques.

These are examples of good practice from the available documentation of experience with JI-type programmes. Much more will be learned by governments and private sector entities by engaging in JI investments and it is important to see what works in real life in the specific circumstances each country faces.

3. Analytical framework for examining institutional issues

Every country has different institutions, historical norms, and processes. Some existing institutional elements will help JI projects. Others may hinder it. Current capacity difficulties are typically:

- lack of institutional framework;
- not enough people to staff activities;
- knowledge and experience with JI limited to a few people;
- lack of co-ordination among government departments.

While every country has unique systems and will require its own solution to the institutional requirements for JI, a common analytical framework within which to identify needs provides a basis for considering the issues. The analytical framework proposed here is simple, and has been used successfully to develop institutional strategies in several countries:

- Identify what functions have to be carried out (i.e. identifying what, not how);
- Identify existing institutions (organisations) that could carry out the functions and existing legal backing that could be used or amended;
- Identify the gaps which show where new institutions and legislation may be needed.

Box 6 sets out a series of institutional functions that are needed at different stages of the project cycle. Some are government institutions, while others require private sector capacity. There are likely to be more functions that could be added to this. The remaining columns are left blank for each country to consider and fill out as appropriate.

Box 6 Gap analysis

Project stage	Institutional implications:	Existing Organisations	Existing Laws	Gaps?
Project Design	<ul style="list-style-type: none"> • establish eligibility requirements • establish baseline rules • authorise legal entities • disseminate info on JI requirements 			
Validation	<ul style="list-style-type: none"> • accredit domestic OEs • private sector capacity to carry out validation 			
Approval & Registration	<ul style="list-style-type: none"> • decide authority to approve & register • set up systems for approval/registration 			
Monitoring	<ul style="list-style-type: none"> • decide standard measurement methods & reporting formats (MVP) and whether to allow case-by-case MVPs • technical capacity to monitor emissions • awareness of MVP requirements 			
Verification	<ul style="list-style-type: none"> • guidance for verifiers • accredit domestic OEs • capacity to carry out verification. 			
Certification	<ul style="list-style-type: none"> • accredit domestic OEs • capacity to carry out certification 			
Issuance	<ul style="list-style-type: none"> • procedure for issuing ERUs • national registry 			
Other	<ul style="list-style-type: none"> • focal point/one-stop shop • public participation • stakeholder processes • information management • contractual/financial/legal framework 			

4. References

- Climate Change Secretariat, 1999. *Convention on Climate Change*, UNFCCC, Bonn, Germany.
- Climate Change Secretariat, 1998. *The Kyoto Protocol to the Convention on Climate Change*, UNFCCC, Bonn, Germany.
- Climate Change Team, 2000. *National Strategy Program Donors Conference, Executive Summaries & Introductions*, Environment Department, World Bank, Washington DC, USA.
- UNFCCC, 1999. *Capacity Building Plan for facilitating capacity-building related to mechanisms pursuant to Articles 6, 12 and 17 of the Kyoto Protocol, Submission from Parties, Note by the secretariat (FCCC/SB/1999/MISC.11)*.
- UNFCCC, 1999. *Capacity-Building: Revised plan for facilitating capacity-building related to the mechanisms under decision 7/CP.4, Note by the secretariat (FCCC/SB/1999/6)*.

5. Annex 1: Additional information

5.1 Joint Implementation Article 6 provisions

Joint Implementation (JI) is a vehicle for project investments in Annex I countries. A project baseline is set that represents the emissions that would have occurred if the investment had not been made. Actual emissions once the investment is made are then monitored. Verified emission reductions from the baseline are awarded “emission reduction units” (ERUs). Governments can authorise companies to participate in this activity. Under JI initiatives, companies have incentives to invest in lower greenhouse gas activities in the expectation that emission reductions will provide an extra revenue stream for investments.

General provisions for JI from COP7 are:

- Parties included in Annex I should refrain from using ERUs generated from nuclear facilities to meet their commitments.
- Projects starting as of the year 2000 may be eligible as Article 6 projects but ERUs shall only be issued for emission reductions after the year 2008.
- Any administrative costs shall be borne by both the Annex I Parties and the project participants (the governments and companies involved).
- Project host countries determine their own criteria for consistency of JI projects with sustainable development goals.

Box A.1 JI: Track 1 and Track 2 provisions

Eligibility requirements for JI participation

Before the government or companies can participate in JI, the government of a country must:

- Become a Party to the Kyoto Protocol i.e. ratify the Protocol).
- Establish its assigned amount and a national system for estimating emissions and sinks.
- Put in place a national registry.
- Submit the required national inventory and supplementary information annually.

A Party (i.e. government) involved in an Article 6 project shall inform the secretariat of:

- Its designated focal point for approving projects.
- Its national guidelines and procedures for approving Article 6 projects, including the consideration of stakeholders' comments, as well as monitoring and verification.

Track 1

Where it meets the eligibility requirements a host Party may use its own processes to verify reductions in anthropogenic emissions as being additional and issue the appropriate quantity of ERUs. Legal entities may only transfer or acquire ERUs if the authorising Party is eligible to do so at that time. A host Party that meets the JI eligibility requirements may also choose to use the "track 2" international verification procedure under the Article 6 supervisory committee.

Track 2

Where a host Party does not meet the eligibility requirements, a verification procedure under the Article 6 supervisory committee is required. The host Party may only issue and transfer ERUs following an appropriate approval process. If a country does not meet the meet the eligibility/participation requirements noted above the international supervisory committee shall:

- supervise the verification of ERUs generated by project activities;
- accredit independent entities to verify ERUs from the projects;
- review and revise reporting guidelines and criteria for baselines and monitoring; and
- elaborate a JI project design document for consideration by the COP/MOP.

Any provisions relating to the commitment period reserve or other limitations to transfers under Article 17 shall not apply to transfers by a Party of ERUs issued into its national registry that were verified in accordance with the verification procedure under the Article 6 supervisory committee.

Source: UNFCCC *The Marrakech Accords & The Marrakech Declaration* (decisions 7/CP.4 and 14/CP.5)(Advance unedited version)

Box A.2 Marrakech Accords requirements for baseline setting

Criteria for JI baseline setting

The baseline for an Article 6 project is the scenario that reasonably represents the emissions that would occur in the absence of the proposed project. This must be established:

- On a project-specific basis and/or using a multi-project emissions factor;
 - In a transparent manner with regard to the choice of approaches, assumptions, methodologies, parameters, data sources and key factors;
 - Taking into account relevant national and/or sectoral policies and circumstances, such as sectoral reform initiatives, local fuel availability, power sector expansion plans, and the economic situation in the project sector;
 - In such a way that ERUs cannot be earned for decreases in activity levels outside the project activity or due to *force majeure*;
 - Taking account of uncertainties and using conservative assumptions.
 - A baseline shall cover emissions from all gases, sectors and source categories listed in Annex A and anthropogenic removals by sinks within the project boundary.
-

Source: UNFCCC *The Marrakech Accords & The Marrakech Declaration* (decisions 7/CP.4 and 14/CP.5)

5.2 The project cycle

The CDM project cycle is the best developed indication of the typical steps required to establish a project, ascertain additional emission reductions, and issue credits. *Box A.3* summarises the five main steps in the CDM project cycle, the entities involved, and the institutional requirements implied by each.

Box A.3 CDM Project cycle and institutions required

Project stage	Description	Institutional implications:
Project Design	The proposed project must follow agreed processes and eligibility rules	Carried out by: <ul style="list-style-type: none"> • project proponents Govt requirements: <ul style="list-style-type: none"> • establish eligibility requirements • authorise legal entities Private sector: <ul style="list-style-type: none"> • awareness of JI requirements
Validation	Project design is independently reviewed and validated.	Carried out by: <ul style="list-style-type: none"> • accredited independent operational entities Govt requirements: <ul style="list-style-type: none"> • accredit domestic OEs Private sector: <ul style="list-style-type: none"> • capacity to carry out validation
Registration	Once validated the project can be registered with the relevant authority.	Carried out by: <ul style="list-style-type: none"> • relevant authority Govt requirements: <ul style="list-style-type: none"> • decide authority to approve & register • set up systems for approval/registration Private Sector: <ul style="list-style-type: none"> • none
Monitoring	Ongoing process for estimating emission reduction from baseline according to agreed methods.	Carried out by: <ul style="list-style-type: none"> • project proponents Govt requirements: <ul style="list-style-type: none"> • decide baseline rules • decide standard measurement methods & reporting formats (MVP) Private sector: <ul style="list-style-type: none"> • technical capacity to monitor emissions • awareness of MVP requirements
Verification	Independent review of the methods used to estimate emission reductions from baseline	Carried out by: <ul style="list-style-type: none"> • accredited independent operational entities Govt requirements: <ul style="list-style-type: none"> • accredit domestic OEs Private sector: <ul style="list-style-type: none"> • capacity to carry out verification.
Certification	Independent certification (based on verification) of emission reductions.	Carried out by: <ul style="list-style-type: none"> • accredited independent operational entities Govt requirements: <ul style="list-style-type: none"> • accredit domestic OEs Private sector: <ul style="list-style-type: none"> • capacity to carry out certification
Issuance	Certified ERUs are issued by the relevant authority	Carried out by: <ul style="list-style-type: none"> • Govt authority or JI Supervisory Committee Govt requirements: <ul style="list-style-type: none"> • procedure for issuing ERUs, national registry Private sector: <ul style="list-style-type: none"> • none
General institutional issues	Designate a national focal point	Carried out by: <ul style="list-style-type: none"> • Govt authorities Govt requirements: <ul style="list-style-type: none"> • Designate a national focal point • Establish stakeholder process/public participation Private sector: <ul style="list-style-type: none"> • None?

Source: CDM project cycle www.unfccc.de and ERM

5.3 Institutions: examples of relevant institutions

Eligible JI project activities could cover many sectors. Organisations having potential to participate in JI processes may be numerous, with several key ones. Their potential roles vary from one organisation to another. Some could be more active at policy or co-ordination level; some at implementation level; others as observers or potentially beneficiaries.

Examples:

- Prime Minister's office
- Ministry of Industry/Energy
- Ministry of Finance
- Central Bank
- Electricity board
- Ministry of Agriculture /Forestry
- Ministry of Environment
- Ministry of Science, Technology
- Pollution Control Department
- Ministry of Transport
- State Department/Ministry of Internal Affairs
- Provincial and metropolitan Electricity Authority
- Private Sector
- Non-government Organisations
- Local Communities
- Etc

5.4 Legislation: Examples of relevant laws

Countries will need to review current national policies, plans, laws and regulations that will support the implementation of JI processes and projects to identify gaps and needs. Examples of relevant policy/laws are:

- Energy Conservation Acts
- Energy Policy Acts Energy Development plans
- Forest Acts, National Park Acts
- Environmental Quality Management Plan
- Emission Standards for Energy
- Energy efficiency standards
- Waste policy and regulations
- Notification of the Ministry of Science, Technology and Environment
- Motor Vehicle Efficiency and Emission Standards
- Pollution Prevention and Control (IPPC)
- Industrial Emission Standards
- Natural Resources and Environmental Policy
- Science and Technology Policy
- Foreign Policy
- Social Policy
- Investment Promotion Policies

5.5 Netherlands ERU-Pt

5.5.1 Introduction

Through the Emission Reduction Units Procurement Tender, ERU-PT, the Ministry of Economic Affairs of The Netherlands has effectively implemented JI by purchasing Emission Reductions Units from project investments in central and eastern European Annex I countries. The Dutch government has also extended the programme to CDM projects in non Annex I countries in a new “CERU-Pt” programme.

5.5.2 Donor/host agreements

The Netherlands has signed a Memorandum of Understanding (MoU) at a bilateral level with a number of countries in which the government agrees to transfer carbon credits to the Netherlands. The Ministry of Economic Affairs and the Ministry of Housing, Spatial Planning and the Environment of the Kingdom of The Netherlands are the relevant Dutch authorities for the purpose of this Memorandum. The MoU specifies the recognition agreement of the Host Country for the transfer of assigned amount for any emission reductions that derive from these projects during the Kyoto commitment period to the Dutch Government. The main aspects covered by the MoU are the level of emission reductions, the contribution of the Netherlands and of the Host country signatories, and the public procurement procedures for the acquisition of ERUs.

5.5.3 Project administration institutions

Key institutional elements that are now considered to be examples of best practice are the project selection and approval processes, monitoring and verification requirements, and payment on proof of delivery of the promised emission reductions (post verification).

5.5.3.1 Project Selection

Senter International, a public institution acting for the Dutch Government, establishes call for proposals for JI and CDM projects. Any company in the world can submit projects in the ERU-Pt tender processes. The project developer can test the validity of its project as a ERU-Pt project against a series of criteria for eligibility including project types and compliance criteria.

The latest ERU-PT JI tender was closed in March 2002, expressions of interest by a total of 27 companies have been submitted for this second round of the programme of which 18 have been accepted for evaluation. The projects that have been registered are well distributed over the various countries. Top runner so far is Bulgaria (6) followed by Romania (5), Hungary (3), Slovakia (2) and Estonia (1). Senter received also an Expression of Interest related to a project located in New Zealand.

Senter assesses the detailed proposal on the basis of the price at which carbon credits are being offered, the feasibility of the investment and its sustainability. Senter also checks the validation and the Letter of Approval and contracts a number of companies. The proposals that comply to the requirements are ranked by price (EUR/CO₂e). Contracts are awarded to the lowest price proposals.

5.5.3.2 Approval Processes

To be approved a project must be validated by a independent third party to ensure that the project design, the baseline, the monitoring and verification protocol and the emission reduction calculations are valid compare to a set of criteria including the Kyoto Protocol rules, applicable UNFCCC documents, ERU-Pt operational guidelines and terms of reference, Host Country legislation, etc. The emission reductions by the project must be shown to be additional and significantly larger to what otherwise would have occurred. The host country's government must give approval for the transaction in carbon credits through a Letter of Approval. Obtaining this letter is easier if the Host Country has signed a MoU, otherwise the project developer has to approach the Host country government.

5.5.3.3 Validation, Monitoring and Verification

The validation is the process of an independent validator evaluation of a project against the requirement of JI project activities on the basis of the project design documents. Verification is the periodic independent review and ex-post determination of the monitored emission reductions or removals that have occurred as a result of the validated project activity.

The first step of the process is the establishment of a validation/verification contract by ERU-Pt, the validator/verifier tasks involve: selecting the validation team; review of the project documents against a set of pre-defined criteria; assessing the project documents against the criteria; on site assessment if judged necessary and cost-effective; writing a draft validation report including any necessary corrective action identified and the reasons for conclusion, decision and corrective actions. After the revision of the report the validator team leader submits a report which is submitted to the project proponent organisation.

5.6 The Prototype Carbon Fund

5.6.1 Introduction

The World Bank's Prototype Carbon Fund (PCF) funds projects in the framework of Article 6 (JI) as well as Article 12 (CDM) of the Kyoto Protocol. PCF financing goes to specific projects that meet the agreed PCF project selection criteria and conform to the procedures of the PCF, which ensure high quality emissions reductions.

The Prototype Carbon Fund, established in the World Bank with contributions from governments and companies, is a first attempt to experiment with the creation of a market in emissions reductions under the Kyoto Protocol's "flexibility" provisions. It has subscribed capital of 180 million USD. The governments currently participating in the Fund are Canada, Finland, Japan Bank for International Cooperation, Netherlands, Norway and Sweden.

5.6.2 Donor/host agreements

Experience from potential CDM projects funded or being investigated by the PCF provides examples of the agreement process between the donor and the host country. Once an agreement on a framework for a project is reached between the PCF and the Host Country project office, a Host Country Agreement between the Host Country and the International Bank for Reconstruction and Development (IBRD), acting as trustee of PCF, is established.

This Host Country Agreement will usually include covenants on Host Country assistance with registration of CERs; compliance by Host Country with the UNFCCC regulatory framework; future ratification of the Kyoto Protocol; access to project sites; disclosure of information; and distribution requirements for sale of additional CERs. In the case of multi project agreements, for each sub-project under the umbrella, a Letter of Approval should be provided by the authorised Host Country entity confirming that the host Country endorses the project for the purpose of Article 12 of the UNFCCC/Kyoto Protocol, and that the project sponsor has ownership of CERs generated by the project.

5.6.3 Project administration institutions

The PCF supports projects directly and through participation in "local or regional carbon funds" that it helps to establish. However, even when the PCF participates in other carbon funds, its financing is identified with specific projects that meet the agreed PCF project selection criteria and conform to the procedures of the PCF, which ensure high quality emissions reductions.

5.6.3.1 Project selection

Participants in the Fund agreed on a set of project selection and portfolio development criteria designed to serve the "learning-by-doing" objective of the PCF while reducing project risk through portfolio diversity. In practice, these objectives are achieved by balancing the Fund's portfolio between: (a) CDM and JI Kyoto Mechanisms; (b) geographic regions; and, (c) eligible technologies and/or fuel switching in projects that create Emissions Reductions additional to a credible baseline of what would have happened without PCF financing. Criteria concerning the absolute level of PCF financing in any one project are intended to expand the number of projects that the PCF supports while keeping transaction and administrative costs at acceptable levels to the Participants. In some cases PCF has agreed to provided part of the funding for the ERUs and CERs upfront, as for example by funding the validation exercise

5.6.3.2 Validation and Monitoring and Verification

The PCF approach to validation, verification and certification process has been developed in order to kick start the carbon market, and the World Bank is strongly aware both of the need to move more quickly than the international rules and also to be in line with international rules as they develop. The objective is to give necessary documentation and assurance for the UNFCCC to register eligible JI or CDM projects and thus to provide confidence for investors that each PCF project will meet the necessary international criteria and will yield valid credits.

The PCF approach includes the following specific elements:

- A baseline study for the project and an explanation of how additionality and other relevant project criteria will be satisfied.
- A Monitoring and Verification Protocol (MVP) for the project.
- Validation of the project design including the project baseline and the MVP.
- Monitoring of emission reductions and other relevant parameters and indicators.
- Periodic auditing of the project and verification that emission reductions have been achieved in compliance with relevant project criteria.
- Certification of verified emission reductions.
- Recognition or registration of the certified reductions by a UNFCCC body.

To date there is only one JI project under the PCF, a Solid Waste Management Project in Liepaja in Latvia, although others are coming through the project pipeline. The purpose of the project is to implement a self-sustaining modern waste management system for city and region of Liepaja.

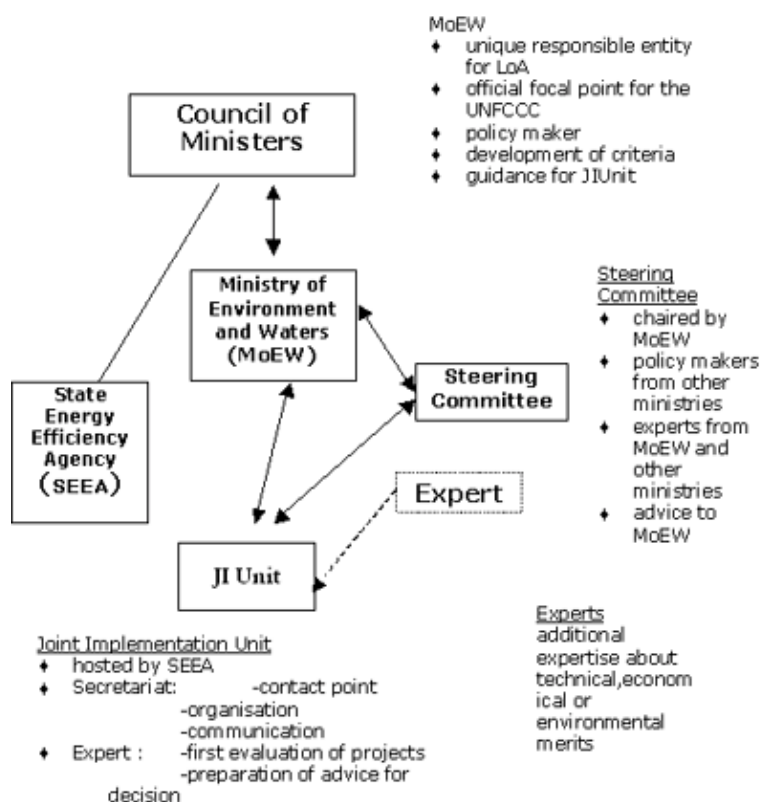
5.6.4 Bulgaria⁵

5.6.5 Introduction

The Joint Implementation Unit is an independent evaluating unit under the direct supervision of the Ministry of Environment and Waters, guided by a steering group with representation from all involved departments⁶, and hosted by the State Energy Efficiency Agency (SEEA).

The Bulgarian government has chosen to set up an interdepartmental JI-Unit as executing agencies of the JI programme, which is guided by a steering group, in which all involved departments are represented, see Figure 1.

Figure 1 Bulgaria's JI Institutional scheme



⁵ Bulgaria Joint Implementation web site: <http://www.seea.government.bg/ji-unit/en/index.html>

⁶ The Netherlands Agency for Energy and the Environment (Novem) and the Netherlands Energy Research Foundation (ECN) implement the capacity building project in Bulgaria and Romania.

The Ministry of Environment and Water MoEW is the official focal point for the UNFCCC and is responsible for the development of project criteria and provision of guidance to the JI Unit. The JI Unit is guided by steering committee composed of policy makers and experts from all involved departments.

5.6.6 Donor/host agreements

The Ministry of Environment and Waters of the Government of Bulgaria and the Dutch government have developed a Memorandum of Understanding for co-operation in the area of greenhouse gas emission reductions, signed on 10 April, 2000. The MoU sets a common agreement for the development of ERU-Pt projects in Bulgaria (see ERU-Pt Section for more details).

5.6.7 Project administration institutions

The main task of the JI Unit is to evaluate the project proposals submitted to Senter International, and prepare an advice for decisions to the Ministry of Environment and Waters of Bulgaria. The staff of the JI-Unit assists in the development of project selection criteria, co-ordinates the Joint implementation activities with the Ministry of Environment and Waters, performs negotiations on credit sharing, and maintains close communications with the project developers.

A significant part of JI-Unit's responsibility is the promotion of ERU-Pt scheme and creation of awareness on Joint Implementation in general. The purpose is to increase the quality and the quantity of future Bulgarian projects submitted to ERU-Pt. The promotional activities include provision of detailed information on ERU-Pt to local business communities, foreign companies active in Bulgaria, and other stakeholders such as NGOs, municipalities, Ministries, agencies, etc. The communication role of the Unit provides for organisation of meetings and workshops, participation in seminars and relative events.

5.7 Poland⁷

5.7.1 Introduction

Poland was among the first Central European countries to have a national JI Secretariat. An Executive Office for the Climate Convention opened in 1999, the JI Secretariat became part of the Executive Office National Fund for Environmental Protection and Water Management. The National Fund provides staff and funding as needed to carry out the duties of the JI Secretariat.

JI Secretariat is affiliated with the National Fund for Environmental Protection and Water Management, under supervision of Minister of Environmental Protection. The Minister of Environmental Protection is authorised to approve AII/JI projects and is responsible for developing a strategy for using the JI mechanism to implement the government's environmental policy. The National Fund is the largest financial institution to support environmental project in Poland. The National Fund has a great deal of experience in selecting good projects, which can be registered under AII/JI programmes, as well as in supervising their implementation and monitoring the environmental effects achieved.

⁷ <http://www.climate.pl/>

Currently the JI Unit is beginning to prepare a new JI Strategy and procedure in accordance with Kyoto Protocol⁸.

5.7.2 Donor/host agreements

For an AIJ/JI project to be implemented in Poland within the framework of the AIJ/JI program the first mandatory step is the official signing of an agreement between the Polish Government and the Government of the country from which the project proponent originates. To date the Polish Government has signed an MoU with the Dutch and the Norwegian Governments.

After the official signing of an agreement between the Polish Government and the Government of the country from which the project proponent originates, the project may be implemented within the framework of the AIJ/JI program.

5.7.3 Project administration institutions

The JI Secretariat is responsible for co-ordinating all activities related to JI, including project proposal evaluation, selection, reporting, and monitoring.

The JI Secretariat has developed evaluation criteria to select projects that best serve Poland's interests.

The implementation procedure for AIJ projects in Poland emerged in several stages. In the first phase, after obtaining documentation from the project proponent, the JI Secretariat passed the information regarding the project to all interested institutions (governors of provinces, ministries and experts) seeking their opinions, if needed. The notification that the proposal had been submitted was also passed to the Director of the Department of Environmental Policy and European Integration of the Ministry of Environmental Protection that in turn notified the Minister of Environmental Protection.

A second period saw the appointment of a Steering Committee for the project by the Minister of Environmental Protection, consisting of the policy makers from various governmental department and various experts. The Steering Committee verified the proposal, clarified all related uncertainties and submitted its recommendations on the project to the Minister of Environmental Protection. If the recommendations of the Steering Committee were positive, the proposal was considered approved by the Polish government and designated for implementation. However, the steering committee has now been abolished.

The first AIJ program, co-financed by the Government of Norway, GEF and the Polish partners, was launched in 1996. To date, the Norwegian program consists of about 40 separate individual projects now under different implementation stages (JI Secretariat, 1999a). In addition, the Polish Government signed an agreement with the Government of the Netherlands, under which 14 projects were pre-qualified and evaluated for possible implementation as JI programs (JI Secretariat, 1999a). Under this program, two pilot projects were selected and they are now completed: the heating systems for two towns Byczyna and Szamotuly. Following a public information campaign, the JI Unit has identified a portfolio of about 70 proposal offers for JI projects.

⁸ <http://www.climate.pl/>

5.8 Czech Republic⁹

5.8.1 Introduction

The National Reference Centre for AIJ/JI projects (NRC) was established within the Department of Integrated Financing of the Ministry of the Environment of the Czech Republic.¹⁰

5.8.2 Project administration institutions

The National reference centre for AIJ/JI has developed a list of information according to which projects will be evaluated (transparent baseline, annual emission reduction, total reduction, economic effectiveness and additionality). Guidelines for project submission and a series of criteria for the evaluation of JI projects include the following:

- (i) the condition of "additionality", i.e. decrease in GHG emissions resulting from the given technology that would be impossible to achieve without implementation of the project. Proposals for projects that are aimed at fulfilling conditions laid down by the relevant environmental legislation valid in the Czech Republic shall be excluded from further proceedings;
- (ii) compliance with the priorities of the State Environmental Policy and with the priorities of the State Program of Support for Energy Savings and Use of Renewable Sources of Energy;
- (iii) the condition of "the best available technology";
- (iv) the benefit for dissemination of know-how and new technologies in the Czech Republic;
- (v) compliance with macro-economical policies, both at national and regional levels (e.g. growth of employment).

⁹ Czech Ministry of Environment web site: www.env.cz

¹⁰ Ms. Lenka Karova (lenka_karova@env.cz)

Part III.

Climate Change Capacity Building in Annex I EITs: Issues and Needs¹¹

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Executive Summary

The goal of this paper is to provide a brief overview of major on-going (year 2002) and planned climate-related capacity building efforts in the EITs (economies in transition) covered under Annex I of the Kyoto Protocol – Belarus, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Russia, Slovakia, Slovenia, Ukraine – in the areas of GHG inventories, JI, emissions trading, and national registries. The paper also addresses some of the challenges that the EITs face in developing and implementing key national systems to mitigate climate change, highlights areas where there is a need for sustained capacity building efforts, and provides preliminary recommendations on how these efforts should be designed.

Main Challenges

To participate in the Kyoto Protocol and its flexibility mechanisms, EIT countries must meet many requirements that apply to them as Parties to the UNFCCC and the Protocol. These requirements include the establishment of national systems for estimating GHG emissions and removal by sinks, annual update and reporting of national GHG inventories, development of national policies and measures to address climate change, creation of national registries, and others.

The EITs have already made significant efforts in building institutional capacity for participation in the Kyoto Protocol. However, despite the important steps that have been made, these countries still face numerous challenges and barriers that inhibit effective implementation of climate change mitigation policies and could prevent the EITs from large-scale engagement in international flexibility mechanisms. Among the main challenges are:

11. The Swedish Ministry of Industry, Employment and Communications commissioned this study for the OECD as part of the materials prepared for the OECD/IEA/IETA workshop “National Systems for Flexible Mechanisms: Implementation Issues in Countries with Economies in Transition” held in Szentendre (Hungary) May 13-15, 2002.

- shortage of sustainable financial resources,
- lack of experienced staff within government agencies,
- competing national priorities,
- uncertainty in the designation of tasks and responsibilities among government agencies,
- deficit of technical resources (clear guidelines, computer models),
- uninformed and/or passive stakeholders (including Parliament, government, industry, and the general public),
- political instability (mainly, frequently changing governments),
- unidentified or unclear connections between climate change policies and other energy and environmental priorities and policies (including EU accession issues).

All these challenges are interrelated and need to be addressed in an integrated way.

One of the main problems with climate change policies in most EITs is that the governments and other stakeholders do not realise that domestic GHG emission reduction measures and participation in the Kyoto mechanisms may lead to substantial financial flows from the West, improved efficiencies, new technologies, and better environmental quality. This lack of awareness contributes, among other factors, to the fact that climate issues are often not viewed as a priority by EIT governments. Since climate is not a priority, the governments do not see an urgent need in devoting additional financial resources to this issue, and in making important institutional and legal decisions that will provide a foundation for the formulation and implementation of climate change strategy and policy.

Once the Kyoto Protocol enters into force, the EITs that are not sufficiently prepared to participate in the Protocol and its Mechanisms will not be able to benefit from its provisions. It is essential that the EIT governments and other in-country stakeholders energise themselves for effective actions in the development of national institutional and legal structures to support climate change policy development. It is also important that the EITs receive comprehensive and co-ordinated support from the international donor community in their efforts to address the challenges and build effective national climate programs.

Capacity Building Programs

Many Annex I governments and international organisations have initiated capacity building assistance programs to assist EITs in their efforts to develop national systems for climate change policy development and implementation, and compliance with the UNFCCC and Kyoto Protocol. The findings of the research for this paper indicate that:

- Although there is a wide range of assistance programs currently implemented in the Annex I EIT region, most of these programs tend to focus on JI and other project activities. To date, less attention has been paid to other important areas like GHG inventories, emissions trading, and national registries.
- Many capacity building programs have had an ad-hoc character and little co-ordination among themselves (especially in their inception stage). However, there is a process of moving from ad-hoc capacity assistance to a more systematic one.
- Almost all agencies that provide capacity building assistance in the EIT region have come to realise that capacity building programs are most successful when they are country driven, involve a wide range of national stakeholders, and have a high degree of in-country ownership. These principles have already been incorporated in the design of many on-going or planned capacity building activities.
- There is no mechanism that is flexible enough to allow EITs to request specific and timely assistance. The EC and several Annex I governments have special programs where EIT governments or other institutions can apply for assistance. However, very often EIT governments do not have resources and/or needed experience to develop necessary applications.

- There is a lack of balance between internal and external resources for capacity building. Initiatives by donor countries are often not matched by internal resources in the EITs devoted to climate change.
- Finally, although there is a wide range of funding institutions and on-going capacity building initiatives, additional efforts are required to meet the EITs' needs.

Capacity building assistance programs vary by type, scope, and size. Some capacity building assistance is provided to specific countries, other capacity building projects include a group of EIT countries, and there are also some institutions that provide general assistance with information and expertise to all EITs.

EIT countries that receive country-specific targeted assistance include Poland, Russia, Ukraine, Belarus, the Czech Republic, Slovakia, Slovenia, Bulgaria, Romania, and Croatia. Poland, Slovakia, and the Czech Republic receive assistance for building institutional and regulatory capacity on domestic and international CO₂ emissions trading and on source-level GHG monitoring and reporting. Russia, Ukraine, and Belarus receive assistance with the development of national GHG inventories. Poland, Bulgaria, Romania, Slovenia, Croatia, and Ukraine receive various assistance with regard to project-based activities, including AIJ and JI. Bulgaria received support from the OECD in the area of national registry. Latvia, Estonia, and Lithuania have had a large experience with AIJ projects, and received some assistance with institutional capacity building in the framework of these projects.

There are several institutions and projects that provide regional assistance where several EIT countries are involved:

- BASREC project provides assistance to Estonia, Latvia, Lithuania, Poland, and Russia on JI and emissions trading.
- IEA has developed a trading simulation game for participants from Estonia, Latvia, Lithuania, Poland, and Russia.
- BASE project assists with methodologies and tools to facilitate implementation of JI in the Czech Republic, Estonia, Hungary, Slovenia, and Poland.
- US EPA provides training on emissions trading to government, industry and NGO representatives from Central and East European countries.
- WRI/REC has recently completed a Capacity for Climate project that analysed institutional capacity of and provided recommendations for further development of capacities in Central and East European countries.
- The European Commission sponsors several projects that evaluate capacity needs of the Accession countries for JI, GHG monitoring and reporting, and emissions trading.

Some institutions provide general assistance to all EITs. They include:

- EEA – assistance in developing GHG national inventories;
- IPCC – workshops and expert meetings on the IPCC methodology and experiences with it;
- PCF*plus* – a World Bank program with activities in the area of outreach, research, and training to enhance the operations and activities of the PCF and its partners, and to promote the market for and quality of GHG projects and emission reduction credits by reducing risks and transaction costs;
- OECD/IEA Annex I expert group – support to Annex I countries in their efforts to build a solid and efficient international policy response to climate change. The Group's recent work focused on monitoring and compliance, emissions trading and project-based mechanisms, domestic policies and measures;
- UNDP-GEF — assistance with project development, national inventory improvements, technology transfer, institutional strengthening, and institutional capacity needs assessment;
- UNITAR – is planning assistance in developing capacity to establish and maintain permanent national GHG inventory systems compliant with international guidance and standards.

The table below illustrates the distribution of capacity building assistance in the EIT region by program area (it might not include all existing programs and activities).

	Canada	NL	US	Finland	Sweden	Japan	Nordic reg. orgs	BASREC	EC	EEA	WB NSS	PCF plus	UNDP-GEF	IPCC	UN ITAR	OECD/IEA	REC	CCAP	WWF	CAN-Europe
JI and other project activities	X	▲	X	X	X			X	X		X	X	X			X	▲	▲		
Emissions Trading			X					X	■							X		X		
GHG Inventory			X						■	X			X	X	■	X		X	X	
Registry															■	X				
General training and awareness building						X	X										▲	X	X	X
X	On-going																			
■	Planned																			
▲	Interrupted or at the completion stage																			

Remaining Capacity Needs

It is clear that all essential areas of climate change policy development, including JI, emissions trading, GHG inventories, and national registries, require additional attention and investments of human, financial and technical resources.

The list of capacity needs in the EITs is known:

- Establishment or strengthening institutions at the national level to co-ordinate and guide activities for climate change policy development and implementation (including national systems for data collection and verification, national GHG registries, and JI units);
- Transfer of methodologies and know-how on monitoring and data collection, data quality assurance and control;
- Methodological and legislative assistance on emissions trading and JI, including such assistance with respect to accession issues;
- Public awareness support;
- Education of local government and industry stakeholders and support for dialogue among various stakeholders;
- Awareness raising among government officials and parliamentarians;
- Training of local experts.

The EIT countries and foreign assistance institutions should join their forces to build the necessary infrastructure that will enable successful participation of the EITs in the Kyoto protocol and its Mechanisms.

It is crucial that the EITs create conditions that would be conducive to the success of technical assistance efforts. *The following are suggested steps for the EITs:*

- Clear division of responsibilities among all institutions involved in climate policy development.
- Internal initiatives, such as the development of strategies and action plans to consolidate various resources for the development of the basics of climate policies, development of strategies and criteria for JI project identification and selection, development of emissions trading framework, etc. The governments should strive to launch a legislative process that would promulgate those policies.
- Involvement of the private sector in the development of national systems that a country needs to participate in the Mechanisms. Engaging and educating local governments and industry representatives on JI and international emissions trading issues may lead to further mobilisation of in-country financial resources.

The donor community, for its part, should also take steps to boost the efficiency of technical assistance programs. *The donor community could take the following:*

- More strategic but flexible assistance (targeted to specific needs but flexible in its approach, timing, and criteria for capacity building projects preparation and approval).
- Designing several large multi-year programs rather than many small and short projects.
- Ensuring co-ordination between donor agencies before they engage in a capacity building effort in order to avoid duplicating activities. It might be useful to develop a web-based or actual capacity building clearinghouse and co-ordination centre, where all interested parties can receive information, request assistance, co-ordinate their efforts, etc.
- Encouraging local initiation and requests for assistance. The assistance will be most effective when it complements in-country efforts to address a specific issue of climate change policy development. In this case, in-country stakeholders lay out the foundation of a project, and local resources are mobilised to work on this specific issue. It might also be helpful to offer advice/assistance to the EITs on developing applications for assistance.

1. Introduction

The goal of this paper is to provide a brief overview of major on-going (year 2002) and planned climate-related capacity building efforts in the countries with economies in transition (EIT)¹² in the areas of GHG inventories, JI, emissions trading, and national registries. The paper has been developed for the OECD/IEA/IETA conference on “National Systems for Flexible Mechanisms: Implementation Issues in Countries with Economies in Transition” held in Szentendre (Hungary), on May 13-15, 2002. It served to facilitate a discussion on what remaining capacity needs are in the EIT countries, and how future capacity building assistance programs should be designed and implemented.

The paper addresses some of the challenges that the EITs face in developing and implementing key national systems (GHG inventories, registries, JI and emissions trading schemes) to mitigate climate change. The paper also highlights areas where there is a need for sustained capacity building efforts and provides preliminary recommendations on how these efforts should be designed. The analysis is based on the interviews conducted by the author with various EIT countries’ governments and other stakeholders, as well as with selected donor community representatives.

¹² Belarus, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Russia, Slovakia, Slovenia, Ukraine.

The paper consists of three main sections. Section 2 discusses main challenges that Annex I EITs face in their efforts to develop and implement national schemes (GHG inventories, registries, JI and emissions trading schemes) for climate change mitigation. Section 3 provides an overview of the current and planned capacity building efforts in the EIT region supported by the European Commission, governments of various Annex I countries (The Netherlands, U.S., Canada, Finland and Sweden), and many multilateral institutions (including the World Bank, PCF, UNDP-GEF, OECD/IEA, EEA, IPCC, and others). Section 4 focuses on remaining capacity building needs and reflects on Decision 3 of COP 7 of the UNFCCC that identifies guiding principles, approaches, and scope of capacity building programs for the EITs. This section offers suggestions on what should be the focus of capacity building assistance for the next several years and how these assistance programs could be made more effective. The section is not aimed at providing a complete list of necessary capacity building efforts but outlines the main areas where effective actions would be beneficial to the majority if not all the EITs.

2. Main challenges of the Annex I EITs in developing and implementing key national systems to mitigate climate change

To participate in the Kyoto Protocol and its flexibility mechanisms, EIT countries must meet many requirements that apply to them as Parties to the UNFCCC and the Kyoto Protocol. These requirements include the establishment of national systems for estimating GHG emissions and removal by sinks, annual update and reporting of national GHG inventories, development of national policies and measures to address climate change, creation of national registries, and others.

The EITs have already made significant efforts in building institutional capacity for participation in the Kyoto Protocol and in developing systems to facilitate the establishment of national GHG inventories, JI policies, and national climate strategies. However, despite the important steps that have been made, the EITs still face numerous challenges and barriers that inhibit effective implementation of climate change mitigation policies and could prevent the EITs from a large-scale engagement in international flexibility mechanisms. Among the main challenges are:

- shortage of sustainable financial resources,
- lack of experienced staff within government agencies,
- competing national priorities,
- uncertainty in the designation of tasks and responsibilities among government agencies,
- deficit of technical resources (clear guidelines, computer models),
- uninformed and/or passive stakeholders, (including Parliament, industry, government, public),
- political instability (mainly, frequently changing governments),
- unidentified or unclear connections between climate change policies and other energy and environmental priorities and policies (including EU accession issues), etc.

All these challenges are interrelated. It is unlikely that fixing one or two problems will ensure EITs' compliance with all the UNFCCC and Kyoto protocol requirements. All the issues need to be addressed in an integrated way. The following points illustrate some of these interrelated challenges and barriers.

One of the main challenges of most EITs is the lack of sustainable financial resources that can be devoted to inventory development and regular updating, climate change strategy and policy formulation and implementation, establishment of national GHG registries, etc. The shortage of financial resources, in turn, is one of the main reasons for inadequate staffing, scarcity of qualified experts, and, as a result, the lack of comprehensive climate change strategy and action plans that would move the policy development further.

The lack of financial resources for climate change policy development and implementation is partly caused by the fact that climate issues are often not viewed as a priority by the EIT governments. The government is likely to devote available resources to economic or social priorities. One of the main reasons why climate is not a priority is the lack of awareness that domestic GHG emission reduction measures and participation in the Kyoto mechanisms may lead to substantial financial flows from the West, improved efficiencies, new technologies, and better environmental quality. Even those who do understand potential benefits that the Kyoto mechanisms can bring to their countries fear that the lack of resources would not allow them to realise these opportunities. Many EIT governments are concerned that engaging in not completely understood CO₂ “trading operations” will leave them with costly obligations in the future, and that all the expected financial and other gains will be lost in a long run.

Another important barrier is institutional gaps and uncertainties. They are caused by the fact that the government does not see any urgency in addressing these issues. Since there are many other competing problems that the EITs face (e.g., economic restructuring, budget deficits, social problems, political instability, other international obligations), the government first attends to the priority areas, and as a result, the institutional basis for climate policy is left unresolved for years. Many EIT countries still have not designated relevant institutions to be responsible for specific areas of climate policy development, and even countries which gave specific agencies co-ordinating roles for some of these areas (mainly, JI) have not provided those agencies with any authority. For example, Poland hosted several AIJ and five JI projects. However, despite the fact that since 1996 Poland has had a JI office and was one of the first EITs to have a JI strategy and project selection criteria, the JI office was not granted official authority to approve proposed projects and international transfer of CO₂ credits. Many other EITs have not even moved that far and there are still internal disputes (mostly between Ministries of Environment and Ministries of Energy) on who should be the supervising authority for JI units.

The designation of authorities for implementation of other national climate change systems is even less clear in many EIT countries. For example, in Russia there are many government agencies, independent institutions, and experts that are involved in the national inventory development (at the national, regional, and sectoral levels). However, there is not yet an organisational structure that could support and coordinate their efforts. This institutional gap not only prevents Russia from developing a comprehensive and accurate multi-year national GHG inventory, but also contributes to financial challenges (as described above). Institutional uncertainty contributes to financial challenges because it leads to untargeted and inefficient use of already scarce financial resources and discourages foreign assistance (since donors are reluctant to provide funding under an unclear institutional framework).

The lack of initiative on the part of EIT governments is also one of the most important constraints of the development of effective climate change policies and in reaping the most benefits from the Kyoto flexibility mechanisms. For example, very often AIJ and JI project selection and approval procedures are investor driven, which does not contribute to using resources strategically (directing them to projects and areas that are the most important financially, economically or environmentally). The absence of comprehensive JI and climate change strategies leads to random project selection and aimless use of obtained financial resources. This situation is further aggravated by the insufficient knowledge of climate issues at the local level and among industry stakeholders. Local government and industry stakeholders could be very effective in identifying possible JI projects and prioritising them for their region, city, or industry. The lack of information and knowledge in these stakeholder groups prevents them from the participation in the development of national climate policies and systems.

While all EIT countries must deal with these difficulties, EIT Accession Countries face an additional challenge – preparations for their future accession to the EU. While approximation with the *Acquis Communautaire* is a complex process (it is still unclear what the full package of requirements regarding climate change policy will be), the approximation process can also be used by the accession countries to

direct resources into building capacity for climate. Candidate countries could also use strategic participation in JI and trading as tools for directing investment to facilitate their accession to the EU.

The main challenge that accession requirements create for the candidate countries is to develop climate policies that would conform to the EU legislation. The accession requirements will affect how candidate countries conduct the JI project cycle. For example, some projects that now qualify for JI will not meet additionality requirements once a host country becomes an EU member with obligations to meet the IPPC Directive (with its BAT provision), energy efficiency standards, and others. A recently proposed CO₂ emissions trading directive, if adopted, will have serious implications for the accession countries since they will have to develop domestic emissions trading schemes compatible with the one at the EU level. The current proposal of the Directive states that “the first accessions are likely to have taken place by the commencement of this scheme and so would be covered by this proposal.” Candidate countries should find resources to be active participants in the development of the proposed directive so that their interests and concerns are taken into account before the directive is in force.

Once the Kyoto protocol enters into force, the EITs that are not sufficiently prepared to participate in the Protocol and its Mechanisms will not be able to benefit from its provisions. It is essential that the EIT governments and other in-country stakeholders energise themselves for effective actions in the development of national institutional and legal structures to support climate change policy development. It is also important that the EITs receive comprehensive and co-ordinated support from the international donor community in their efforts to address the challenges and build effective national climate programs.

3. On-going and planned climate change capacity building initiatives in the EITs

Many Annex I governments and international organisations have initiated capacity building assistance programs to assist EITs in their efforts to develop national systems for climate change policy development and implementation, and compliance with the UNFCCC and Kyoto Protocol. The findings of the research for this paper indicate that:

- ❖ Although there is a wide range of assistance programs currently implemented in the Annex I EIT region, most of these programs tend to focus on JI and other project activities. To date, there has been less attention to other important areas like GHG inventories, emissions trading, and national registries.
- ❖ Many capacity building programs have had an ad-hoc character and little co-ordination among themselves (especially in their inception stage)¹³. However, there is a process of moving from ad-hoc capacity assistance to a more systematic one. Several interviewed agencies indicated that they were developing comprehensive capacity building assistance strategies.
- ❖ Almost all agencies that provide capacity building assistance in the EIT region have come to realise that capacity building programs are most successful when they are country driven, involve a wide range of national stakeholders, and have a high degree of in-country ownership. These principles have already been incorporated in the design of many on-going or planned capacity building activities.
- ❖ There is no mechanism that is flexible enough to allow EITs to request specific and timely assistance. The EC and several Annex I governments have special programs where EIT governments or other

¹³ Once capacity building programs enter the implementation phase, most programs implemented in the same region or country try to coordinate with each other and keep each other informed of their actions.

institutions can apply for assistance. However, very often EIT governments do not have resources and/or needed experience to develop necessary applications (which tend to be overly bureaucratic and require a lot of work to complete).

- ❖ There is lack of balance between internal and external resources for capacity building. Initiatives by donor countries are often not matched by internal resources in the EITs devoted to climate change.
- ❖ Finally, although there is a wide range of funding institutions and on-going capacity building initiatives, additional efforts are required to meet the EITs' needs.

The following is an overview of current and planned capacity building activities in the EIT region, which begins with a summary table. The overview focuses on programs that are dedicated to capacity building, but it also provides information on some AIJ and JI programs implemented by Annex I countries in the EIT region where some components of these efforts can be qualified as capacity building.

Organisation/ Government	Climate Change Area	Country	Timeframe
<i>BILATERAL ASSISTANCE</i>			
<i>The Netherlands</i> (Ministry of Economic Affairs)	JI	Bulgaria, Romania, Poland	Interrupted, might continue in the future
<i>USA</i> (USAID, US EPA)	National strategies, GHG inventories, emissions trading	Ukraine, Slovakia, Poland, the Czech Republic, Russia	On-going
<i>Canada</i> (CIDA)	National strategy, JI, GHG inventory	Ukraine	On-going
<i>Japan</i>	Training, and funding of a climate capacity building project at the REC	Small number of reps. from EIT countries	On-going
<i>Finland</i>	AIJ/JI activities	Baltic Sea region	On-going
<i>Sweden</i>	AIJ/JI activities, research, some capacity building	Baltic Sea region	On-going

Organisation/ Government	Climate Change Area	Country	Timeframe
<i>INTERNATIONAL ORGANISATIONS/MULTILATERAL ASSISTANCE</i>			
<i>European Commission</i>	JI	Candidate countries	On-going
	GHG inventories, emissions trading	Russia, NIS, candidate countries	Planned
<i>World Bank</i>	JI, national strategies, climate policy	Ukraine	On-going
<i>PCFplus</i>	JI	EIT countries with PCF projects	On-going
<i>UNDP/GEF</i>	National communications, project activities	Belarus, Slovenia, Croatia	On-going
<i>OECD/IEA</i>	JI, GHG inventories, national registries, emissions trading	EIT countries	On-going
<i>UNITAR</i>	Training on GHG inventories, and registries	CG-11	Planned
<i>European Environment Agency</i>	GHG inventories	EIT countries	On-going
<i>IPCC</i>	GHG inventories	EIT countries	On-going
<i>BASREC</i>	JI; emissions trading	Estonia, Latvia, Lithuania, Poland, Russia	On-going
<i>Nordic Regional Organisations</i>	JI; training, research	Estonia, Latvia, Lithuania, Russia, Poland	On-going
<i>NGOS AND BUSINESS ASSOCIATIONS</i>			
<i>CCAP</i>	Emissions trading; climate change strategies, GHG inventories	Slovakia, Poland, the Czech Republic, Ukraine	On-going
<i>CAN-Europe; CANCEE</i>	Raise climate awareness, independent review of national communications	EIT countries	On-going
<i>REC</i>	JI, monitoring, reporting, climate strategies	Central and Eastern Europe	At the completion stage
<i>WRI</i>	JI, monitoring, reporting, climate strategies	Central and Eastern Europe	At the completion stage
<i>WWF</i>	Climate strategies, GHG inventories	Russia	On-going

3.1 Bilateral Assistance

3.1.1 The Netherlands

The Netherlands has developed the ERUPT scheme (Emission Reduction Unit Procurement Tender) to implement JI with Central and Eastern European Countries as host countries. Bulgaria, Romania and Slovakia are the first countries with which the Netherlands intends to implement ERUPT. To address host countries capacity building needs for their participation in JI and ERUPT, the Netherlands launched support for the host countries in capacity building. The Dutch Ministry of Economic Affairs provides financial assistance for capacity building initiatives in Bulgaria, Romania, and Poland. The Netherlands Agency for Energy and the Environment (NOVEM) and the Netherlands Energy Research Foundation

(ECN) implemented a capacity building project in Bulgaria and Romania. The project included support for the development of required institutional set-up and staff capacity, development of implementation procedures, transfer of knowledge, training in Joint Implementation and ERUPT. The project created JI units in both Romania and Bulgaria and trained two staff members to work in each of these units. This assistance project has been interrupted to allow for the host countries to decide what they want to do with the JI units. The assistance might continue in the future.

In Poland, the Dutch Ministry of Economic Affairs funded one workshop for Polish stakeholders and Dutch investors to discuss institutional and methodological issues of JI. Under this project, the CCAP, a US based organisation developed a paper for the Polish government on multi-project baselines for JI in the power sector. This assistance was discontinued due to some uncertainties with the institutional structure and further climate policy development in the Polish government but may be resumed in the future.

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3.1.2 The United States of America

The U.S. government has provided capacity building assistance to the EIT countries through its Agency for International Development (USAID), the Environmental Protection Agency (U.S. EPA), and the Department of Energy (U.S. DOE), including DOE's Pacific North-West National Laboratory (PNNL). Currently only USAID and U.S. EPA are engaged in capacity building efforts in the EITs.

U.S. EPA, through its funding of the Center for Clean Air Policy (CCAP), provides assistance to Poland, Slovakia, and the Czech Republic in developing recommendations on national CO₂ emissions trading schemes, and to Ukraine on developing regional/local capacity for participation in the UNFCCC. This effort started in 1999 and is still carrying on. The work in Eastern Europe includes analysis of the above mentioned countries' greenhouse gas (GHG) emissions data, identification of participating sectors in emissions trading, establishment of CO₂ caps, development of recommendations for allowance allocation methods and source-level monitoring, reporting and verification requirements. The work also involves detailed analysis of bottom-up (source-level) energy and CO₂ emissions data.

U.S. EPA (together with the CCAP) has also organised two training courses on emissions trading for government, NGO and industry representatives from Central and East European countries. Two one week-long courses were held in Washington DC in 2000, and in Prague in May 2002.

U.S. EPA also provides capacity building assistance to Russia and Ukraine in the area of GHG inventory development at the regional (oblast) level. In Ukraine, the work focuses on the development of a Lviv regional GHG inventory and development of a regional climate change strategy, including identification of possible JI projects. In Russia, U.S. EPA assisted with the development of several regional inventories (Novgorod, Nizhniy Novgorod, Sverdlovsk, Sakhalin, and Chelyabinsk oblasts, and Khakassia Republic).

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USAID provides large-scale climate change capacity building assistance to Ukraine.

Under this program Climate Change Initiative (CCI), a project management and information centre was established in Kiev. The CCI Center provides information and links to international climate change programs and organisations, and maintains a database of all climate change activities in Ukraine. The CCI provides assistance to Ukraine on institutional strengthening, development of climate change policy, identification of GHG mitigation projects for foreign investment, and facilitates increased involvement of non-governmental organisations (NGO) and industry in climate change activities.

In particular, the CCI is helping Ukraine to analyse options and develop recommendations for a structure that would enable Ukraine to participate in international mechanisms under the Convention. It provides assistance in the development of technical methods to conduct Ukraine's GHG inventory. The CCI holds workshops, seminars and training courses for government officials, NGOs, enterprise managers and climate change specialists. Training topics include: Basics of Climate Change, Economics of Climate Change, Climate Change Transactions, GHG Emissions Inventory, Climate Change Mitigation, Monitoring, Evaluation, Reporting, Verification and Certification of GHG Emissions Reductions, Project-Level GHG Baseline Determination, Project Preparation and Financing, and Carbon Sequestration by Forestry and Agriculture. The CCI co-operated with Ukrainian officials and experts in conducting a training needs assessment and in developing a training strategy.

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3.1.3 Canada

The Government of Canada through the Canadian International Development Agency (CIDA) provides funding to the Canada-Ukraine Environmental Co-operation Program (CUECP) for the years 1999-2002. This Program comes under the provisions of the “Memorandum of Understanding between the Government of Canada and the Government of Ukraine on Co-operation on Climate Change, Including Joint Activities” signed in January 1999. The Program is administrated by the Institute of Public Administration of Canada.

The Program’s goal is to improve Ukraine’s transition to a market economy by enhancing capacities to manage environmental protection issues and activities. The Program’s focus is capacity building for climate change management in three main areas:

- Development of Ukraine’s National Climate Change Strategy,
- Development of a climate change management structure in Ukraine, and
- Development of policy and legal framework for Joint Implementation projects.

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3.1.4 Finland

Finland does not have specific capacity assistance programs in the EITs. The Finnish government has a pilot program on CDM and JI. The Program’s goal is to build administrative capacity in Finland as well as to prepare guidelines for the selection and implementation of projects. Some Activities under this pilot program can be regarded as capacity building in partner countries.

The Pilot Program was launched in 1999 and allocated 8.4 million EUR for a three-year period between 2000 and 2002. The project pipeline includes over thirty potential projects. Potential projects have been identified by Finland in Estonia, Latvia, Lithuania, Poland, and Russia. The Finnish Ministry of Environment has signed a Memorandum of Understanding with Latvia, Lithuania, Poland, Ukraine and Estonia concerning JI co-operation. Finland is looking forward to signing a MoU with Russia, as well. In addition to MoU with Estonia the two countries are in the process of finalising a Country by Country Agreement that defines detailed rules for JI co-operation and designates national authorities competent to conclude individual project agreements. The Pilot Program’s Guidelines for selecting and implementing JI and CDM projects were developed in 2000, and a new version incorporating the developments in Marrakech was finalised in spring 2002.

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3.1.5 Sweden

The Swedish International Climate Investment Programme started in 1993 with the so-called Programme for an Environmentally Adapted Energy System (the EAES Programme), mainly directed to the Baltic Region and Russia. The Swedish Energy Agency (Statens Energimyndighet) - STEM, has overall responsibilities concerning the EAES Programme, which includes the Swedish contribution to the Pilot Phase for Activities Implemented Jointly (AIJ) and international climate investment activities. During the period 1993 - 2001 around 70 projects have been implemented in Estonia, Latvia, Lithuania, Russia, and Poland.

The Swedish programme is mainly directed to investment projects but has also included a number of workshops, seminars, conferences and training courses that have been arranged in all the Baltic States as well as in different regions in Russia.

Although the climate issues have not been the main subject of some of these efforts, the climate aspects and environmental awareness have constituted an important part of these activities. Over the years a number of local experts and consultants have been engaged in all parts of the project phases and in seminars. For example, data for all the projects, as requested in the UNFCCC Uniform Reporting Format (URF) for AIJ projects, have always been collected and analysed by local experts in the respective countries. Local experts have also been engaged in different research work, such as the study "Top-down CO2 Emission Baselines for the Estonian District Heating Sector" and the research study of a number of fuel conversion projects in the Baltic States and their compliance with the Kyoto Protocol.

In late 2001 the Swedish Government assigned a special negotiator for bilateral agreements on JI co-operation in Central and Eastern Europe. Russia and the Baltic States are priority areas in this work and negotiations and/or discussions are going on with all these countries. It is foreseen that capacity building will constitute an integral parts when JI investment projects are planned and implemented in these and other countries. In addition to the climate investment programme, the energy decision in 1997 also included a climate research programme directed both on building up national climate research capacity in Sweden as well as co-operation activities with the countries in the Baltic Sea Region and Russia. For the seven-year period 1998-2004, 70 MSEK has been allocated for the climate research and capacity building programme.

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3.1.6 Japan

Japan has implemented several AIJ projects in the EIT region and has contributed to capacity building by providing training and organising study tours. Japan International Co-operation Agency - JICA is the main agency responsible for co-ordination of co-operation activities with other countries, including the EITs. JICA can provide assistance in providing technical experts for research activities or training, organising education and training courses for experts from other countries, developing national climate and energy strategy plans, etc. During the year 2000, 17 513 persons were invited to Japan for training, 9 428 members of study team were dispatched and 3 381 experts were sent from Japan (and other countries). 948 among them are to/from EIT Parties.

NEDO - New Energy and Industrial Technology Development Organisation – is another agency that has been active in developing climate-related projects in the EIT region. NEDO has financially supported several AIJ projects in the EITs.

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3.2 International Institutions and Multilateral Assistance

3.2.1 World Bank National Strategy Studies Program

In 1997, the World Bank and the Government of Switzerland formally launched a collaborative initiative to assist potential host country governments in exploring opportunities and potential benefits from participating in the AIJ pilot phase and in formulating their own positions regarding AIJ and JI.

Prior to the Kyoto conference, the program focused on countries with economies in transition. Following the agreement in Kyoto on the establishment of a Clean Development Mechanism (CDM), the scope of the program was expanded to include developing countries. In addition to Switzerland, the program grew to include other bilateral donors (e.g. Australia, Germany, Finland, Austria and Canada) which provide co-financing to host countries to analyse the issues of implementing the KP flexible mechanisms in a National JI/CDM Strategy Study (NSS). Host country interest, donor preferences and a country's greenhouse gas

emissions reduction (i.e., GHG offset potential) are among the factors that determine the selection of NSS host countries. So far in the EIT Annex I region, the NSS have been carried out in Slovakia, the Czech Republic, Russia, and Ukraine (under implementation).

The National Strategy Studies Program aims at enhancing local expertise. Host country experts conduct the studies in collaboration with experts from donor countries and the World Bank. The studies address the issues of the national potential for greenhouse gas emission reduction, assess potential GHG abatement projects and their costs, and evaluate the JI/CDM project cycle and respective requirements for institutional and administrative arrangements. In the process, pipelines of potential JI and CDM projects at the national level are established.

The NSS program, in close co-operation with the Swiss Government, will host in Switzerland (23-25 September, 2002) a workshop with the participation of all NSS host countries (about 25-30). The purpose of the workshop is to assess the capacity building needs in the program countries based on a survey prepared prior to the event, and to discuss how to address the CB needs toward the implementation of the KP CDM/JI flexible mechanisms.

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3.2.2 European Commission

The European Commission has several programs and projects through which it provides assistance to the candidate countries and to the NIS in building capacity for participation in the UNFCCC and the Kyoto Protocol. The most important programs include TACIS, PHARE, SYNERGY and the Fifth Framework Programme.

Through TACIS and PHARE programs, the EC can provide targeted assistance to specific countries, while SYNERGY and the Fifth Framework Programme fund research and general capacity building on a regional level. Several key examples of the current climate-related capacity assistance projects are the BASE project (funded through the Fifth Framework Programme) and BASREC (funded through the SYNERGY program).

The nature of the TACIS and PHARE programs is such that resources are allocated to priority areas identified by the recipient countries for a specific time period. For example, accession countries develop national action plans of their accession efforts every year. In these plans they give priority to specific pieces of legislation to be reviewed and harmonised. In response to these action plans, the EC provides funding through its PHARE program in the areas that were identified in the action plan. If climate issues are not mentioned in the action plan, than the EC is unable to provide assistance in this area. With other countries, the EC has Partnership and Co-operation Agreements that provide a similar mechanism of requesting assistance for priority areas.

In addition to these large assistance programs, the EC Environment Directorate also issues competitive tenders that aim at either identifying specific capacity building needs or providing targeted assistance to the EITs in specific areas of climate change policy development. Currently, one project that identifies capacity needs of the candidate countries for JI and monitoring and reporting is under implementation, and other two have been announced. One of them would identify capacity needs of the candidate countries in emissions trading, while another would evaluate the monitoring and reporting situation in Russia and suggest areas for capacity building assistance.

TACIS

In its document “TACIS Regional Co-operation: Strategic Considerations 2002-2006 and Indicative Programme 2002-2003,” the European Commission states that climate change is one the priority areas of the EC’s assistance program to the NIS. The main objectives in the climate change area are the development of institutional capacity to enable the NIS to implement their obligations under the UNFCCC and Kyoto protocol, and assistance in the establishment of national inventories of GHG emissions.

For 2002, the EC is allocating 4 million EUR for climate change assistance programs in the NIS, and the proposed activities are:

- Capacity building to establish GHG inventories and national systems to estimate emissions and develop emission projections (all NIS);
- Assistance with the development of networks and partnerships in scientific research and exchange of climate-related data and modelling results;
- Capacity building for emissions trading, JI, and CDM, including pilot projects.

SYNERGY

SYNERGY is a co-operation program managed by the Directorate General for Energy and Transport (DG TREN) of the European Commission. It finances mutually beneficial co-operation activities with non-EU countries in the field of the formulation and implementation of energy policy. The objective of the SYNERGY program is to improve the competitiveness of EU industries, enhance the security of energy supply, promote sustainable development, and improve energy efficiency. According to the new Guidelines for the SYNERGY program (L125/24, the Official Journal of 05.05.01), the implementation of the program will refocus on activities related to security of energy supply, and implementation of the Kyoto protocol.

SYNERGY supports the following activities:

- Advice and training in energy policy;
- Analysis and forecasting in energy matters;
- Closer dialogue and exchange of information on energy policy, notably through conferences and seminars;
- Regional transboundary co-operation; and
- Improving the framework for industrial energy co-operation.

Currently, SYNERGY funds BASREC activities, including its climate change group, and “Eastern Climate Change Network – Establishment of a Climate Change Network in CEEC and CIS” project. Please see description of the BASREC below.

Eastern Climate Change Network – Establishment of a Climate Change Network in CEEC and CIS

The main goal of this project is to increase security of energy supply for the EU and candidate countries by promoting efficiency of energy use in producer countries (CIS). In relation to the Kyoto Protocol, the project ensures a common approach to evaluation, presentation and certification of emission reductions achieved, in CEEC and CIS. The project will establish the Eastern European Climate Change Network on the basis of existing local Energy Centres and Agencies (in the following countries: Russia, Ukraine, Slovakia, Poland, Romania, Bulgaria, Estonia, Azerbaijan, Georgia, Armenia, Uzbekistan). The project will also create a database of priority projects, aimed at emission reductions in those countries. Capacity building strategy will also be elaborated as part of the project activities. The project also includes some training component.

Fifth Framework Programme

The Fifth Framework Programme provides a coherent framework for supporting research and technological development as part of EU research policy and constitutes a four-year strategic plan (1999-2002). During this period, it will stimulate transnational collaboration in research, particularly between industry and universities, and the establishment of networks of excellence.

“Energy, Environment and Sustainable Development” is one of the four thematic programs of the Fifth Framework Programme. It focuses directly on a number of pressing environmental and energy concerns, including global change, climate, and biodiversity. Priority is given to issues covered by international treaties or conventions where the EU or its member states are signatories. The budget of the Energy, Environment and Sustainable Development program is 2 125 million EUR, 1 083 million EUR of which is for the Environment and Sustainable Development sub-program and 1 042 million EUR for the Energy sub-program (not including nuclear energy).

BASE project that focuses on various JI issues is an example of a research project that is funded by the Fifth Framework Programme.

BASE

The BASE project (<http://base.energyprojects.net/>, <http://joint.energyprojects.net/>) is a continuation of the JOINT initiative (which was completed in 2002) and is funded through the Fifth Framework Programme. The goal of BASE is to promote clean energy investments through Joint Implementation in Central and East European countries. BASE seeks to unblock the barriers that currently exist in the evaluation and approval of JI projects in the electricity sector in the five participating accession states (Estonia, Poland, the Czech Republic, Hungary, and Slovenia). BASE is a consortium of these countries with Austria, Finland, and the UK. In close co-operation with government and other national stakeholders, the project team is developing a set of baseline tools, methodologies, and guidelines that are tailored to the climate change objectives of the five candidate accession states participating in the project.

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3.2.3 PCFplus

PCFplus is a World Bank program, which supplements the Prototype Carbon Fund (PCF) with activities in the area of outreach, research, and training. PCFplus is funded separately from the PCF. It draws on funds from the governments of Canada, Sweden and Finland through trust fund arrangements at the World Bank. The estimated budget for the period of July 2001 through June 2002 is 1.22 million USD.

The objectives of the program are to build capacity of host countries and the PCF participants, to enhance the operations and activities of the PCF and its partners, and to promote the market for and quality of GHG projects and emission reduction credits by reducing risks and transaction costs. In the EIT region, PCF projects are currently implemented only in Latvia and Poland.

Outreach component. Several capacity building oriented outreach and training events will be organised around PCF project negotiations during the fiscal year 2002.

Research component. Three studies are underway or in final stages of development: “Baselines for Energy Efficiency Projects Addressed Through Energy Efficiency Intermediaries,” the second part of “Market Intelligence Study” (national and international regulations) and “JI in the Context of EU Accession.” Among the proposed research projects for 2002 is a methodological study with a focus on baselines for land use and forestry activities in Eastern Europe.

Training component. In 2002, a key objective is the implementation of a detailed training program that will be designed to build the capacity of host countries to deliver emission reductions and to benefit from CDM and JI investments. The PCFplus training work program for 2002 includes the design and delivery of training in co-ordination with other World Bank climate change capacity building activities. At least three sets of modules will be developed in the following areas: project development for carbon financing, implementing a PCF project, and negotiating a successful emission reduction agreement. It is important to emphasise that the training component is designed for PCF project participants only.

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3.2.4 BASREC

Energy ministers of the Baltic Sea region countries and the European Commission decided at their conference in Helsinki in October 1999 to set up an inter-governmental Baltic Sea Region Energy Co-operation (BASREC) project. This agreement releases the funding of 1.182 million EUR for the BASREC

2002 project with 15 individual tasks to be carried out between 11 participating countries: Denmark, Estonia, Finland, Germany, Iceland, Latvia, Lithuania, Norway, Poland, Russia, and Sweden. The European Commission is represented by the Directorate General for Transportation and Energy (DG TREN).

The work of the Climate Change Group within BASREC seeks to establish the Baltic Sea Region as a testing ground for the use of the Kyoto Protocol's flexible mechanisms. The work will be focused on developing a common understanding of the concepts related to the flexible mechanisms among the countries in the region, and on building capacity to implement them.

The main activities include:

- Arranging a simulation game on emissions trading together with IEA.
- Preparing a handbook for regional JI projects.
- Facilitating the implementation of investments of some AIJ/JI projects, using NEFCO as a clearinghouse.
- Preparing a framework agreement and a contract model to be used in JI projects.

A BASREC conference was convened to present and discuss principles of the implementation of the flexible mechanisms on the testing ground in the Baltic Sea Region. The Conference (organised in May 2002 in St. Petersburg) contributed to building capacity and competence among business, authorities and other stakeholders, and improving the common understanding of the role of the mechanisms and the ways of implementing them.

Another focus area of BASREC is energy efficiency. The energy efficiency group will work with relevant financial institutions on possibilities to develop new financing instruments suited for energy efficiency projects and for small-scale combined heat and power production. Further development of the capacity building and clearinghouse activities will also be important components of this work.

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3.2.5 Nordic Regional Organizations

There are several Nordic regional organisations that provide some kind of capacity building assistance to the EITs in the Baltic Sea region in the field of climate, energy and environment. These organisations include Nordic Task Force for Climate Issues, Nordic Energy Research Institution (NEFP), and Nordic Council of Ministers. Nordic Council of Ministers provides support for collaboration between the Baltic states, Northwest Russia and the Nordic countries in the area higher education and research, including education, training, research grants, workshops, etc.

Nordic Energy Research (NEFP) is a new Nordic institution under the Nordic Council of Ministers (MR-Energy) that was established in 1999. The NEFP is a program-based network of skilled experts and leading researchers in the Nordic countries and adjacent areas, with the aim of co-operating in research, research training and development. The mission of NEFP is to continue the development of expertise within selected fields of energy-related research at universities, colleges and other research institutes in the Nordic countries and adjacent areas. The NEFP is able to provide travel grants and scholarships for research, training, workshops and conferences. One of the goals of this institution is to improve the co-operation between the Nordic Countries and the adjacent areas (Baltic countries, Northwestern Russia). From 2003 the following new components will be included in the program' strategy:

- Integration of the Energy Market
- Renewable Energy Sources
- Energy Efficiency
- The Hydrogen Society
- Consequences of Climate Changes in the Energy Sector

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3.2.6 UNDP-GEF

UNDP-GEF has two types of capacity assistance efforts:

- Capacity building (“enabling”) activities that take place in the framework of larger projects, such as energy efficiency or renewable energy projects. Enabling activities are taking place in Slovenia and Croatia, as well as Belarus (focused on preparing its First National Communication). These activities can also include technology transfer, modelling, and inventory development.
- Activities that focus completely on building capacity.

There are three special initiatives to build capacity for mitigating climate change. First, there is a program that started in 2000 to provide basic support to GEF operational focal points in transition country governments. The amount of funding is small (approximately USD 8 500/year), but it is designed to cover miscellaneous items such as translations, web site development, or special conferences, that cannot be funded from other sources. Second, there is a series of country dialogue workshops. Finally, there is the

Capacity Development Initiative, or CDI. This is a global, 18-month consultative planning process. It is supposed to result in a comprehensive strategy and multi-year action plans to build capacity in GEF-eligible countries.

The CDI is a strategic partnership between the UNDP and the GEF Secretariat to produce a comprehensive approach for developing country-level capacity to address challenges of global environmental action in the areas of biodiversity, climate change, and land degradation. The work plan for CDI is divided into three stages: assessment, strategy development, and development of action plans in these areas.

In September 2000, UNDP/GEF published a report "Country Capacity Development Needs and Priorities: Regional Report for Eastern Europe and Central Asia." At this time, many EITs are filling up self-assessment questionnaires distributed by GEF. This process will result in the development of capacity building action plans. However, it is unclear whether UNDP/GEF will have any financial resources to assist countries in meeting their capacity needs.

It is important to note that GEF cannot currently be used to build capacity that is specific to the Kyoto Protocol. However, the UNDP sees the Kyoto Protocol as a future source of guidance to GEF activities once the Protocol enters into force. In addition, there is no restriction on GEF support for JI projects or projects with a tradable permit component.

Finally, GEF supports many capacity building activities that will have spillover effects. In other words, they will benefit transition countries' ability to implement JI and emission trading. These activities include strengthening ministries, facilitating technology transfer, and supporting the development of inventories and improved data quality.

The UNDP has recently launched a new initiative "TrustFund for Sustainable Energy". Through this effort the UNDP will provide a comprehensive assistance in developing national sustainable energy programs and policies, transferring knowledge and technologies, enhancing institutional capacity, identifying JI and CDM projects, etc.

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3.2.7 OECD/IEA

The OECD and the IEA do not have specific capacity building programs in the EIT region. However, several initiatives implemented by these agencies do assist EIT countries in their efforts to develop climate policies and structures. For example, the OECD and the IEA, through the Annex I Expert Group, are supporting Annex I countries in their efforts to build a solid and efficient international policy response to climate change. The Group's recent work focused on monitoring and compliance, emission trading and project-based mechanisms, domestic policies and measures, as well as support to countries with economies in transition.

Recently, the Annex I Expert Group sponsored three case studies in the EIT region: on emissions trading in the Czech republic, on the registries in Bulgaria, and on the inventory development in Russia. These case studies evaluate current situations and capacity needs, and provide preliminary recommendations on the development of these key national systems.

The IEA has recently contributed to capacity building on emissions trading by developing and guiding a trading simulation game as part of the BASREC project in the Baltic Sea region. Previously, the IEA developed several other trading simulation games that included a wide range of participants, including government and industry representatives from several EIT countries.

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3.2.8 European Environment Agency

EEA provides assistance to many EITs in developing GHG national inventories. EEA provides the EITs with methodology and software tools for compiling GHG inventories, (see: <http://air-climate.eionet.eu.int/tools>), as well as training on these tools. EEA funds five European Topic Centres, one of which is the ETC Air and Climate Change, (see: <http://air-climate.eionet.eu.int/>).

While the Agency has been working with most of the candidate countries since 1996 on specific projects with support from the EU's PHARE program, EEA membership allows their full and permanent integration into the Agency's activities and decision-making. This will help to familiarise these countries with EU procedures prior to joining the Union and aid their compliance with EU legislation. Bulgaria, Latvia, Slovenia and Slovakia are new members of the EEA, and it is expected that the Czech Republic, Estonia, Hungary, Lithuania, Poland, and Romania will become EEA members in a very near future.

Examples of country support tools

CollectER (Collect Emission Register) is a tool for national air emissions experts to create and update a national emissions inventory and to prepare appropriate emissions data for international reporting obligations.

ReportER (Report Emission Register) is a software tool designed for national experts on air emissions. Based on the national emissions inventory data stored in the CollectER annual inventory databases, the current version of ReportER can create a set of UNFCCC reports and UNECE/CLRTAP/EMEP reports. The new version of ReportER is called ReportER II.

EstimatER (Estimate Emission Register) is an expert system that supports the estimation of emissions from source sectors, exactly following the IPCC 1996 Revised Guidelines and exporting the data for this sector into the UNFCCC Common Reporting Format (CRF).

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3.2.9 IPCC

The IPCC does not have targeted capacity building programs. However, some of its activities could be qualified as capacity assistance. These activities include workshops and expert meetings that are organised by the Technical Support Unit (TSU) for the IPCC. This Unit is based at the Institute for Global Environmental Strategies (IGES) in Japan and is funded by the Government of Japan. However, these workshops and expert meetings are organised only when they are necessary for the completion of a working group's work plan or a task of the IPCC.

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3.2.10 UNITAR

UNITAR is not currently providing any support to countries with economy in transition. There is a proposal that the UNITAR is developing together with the CG11 for a project on institutions/human resource capacity building for GHG inventories. This is still a draft and not yet funded.

The proposed capacity and institution building program is aimed at providing a phased but comprehensive response to the needs identified for the CG 11 Parties. It will enable them to fulfil their commitments under the Convention, and, at a later stage, to implement the Kyoto Protocol, by developing their capacity to establish and maintain permanent national GHG inventory systems compliant with international guidance and standards. In particular, the proposed support program will:

- Facilitate a process for planning and establishing permanent national inventory systems in each of the CG11 countries and, in particular, for setting up National Registries;
- Launch a bilateral and multilateral process to address the long-term needs of CG11 countries in establishing and maintaining national inventory systems which would comply with international guidance and standards;
- Provide training and institutional support to address human resource development needs of CG11 Parties in a way that facilitates the development of qualified experts needed in national inventory systems;
- Ensure that new capacities needed in CG11 Parties build upon the experiences and competencies that already exist in each country.

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3.3 Business Associations and NGOs

3.3.1 Center for Clean Air Policy

The Center for Clean Air Policy (CCAP) is a Washington-based non-profit think tank with a staff of specialists on energy and environmental policy. The Center seeks to promote and implement innovative solutions to major environmental and energy problems that balance both environmental and economic interests.

Through its Economies in Transition Program, the Center is working with governments of several Central and Eastern European countries to assist them in developing strategies for addressing climate-change issues and to enhance their understanding of emissions trading. Since the early 1999, the Center has been working in Poland, Slovakia, Ukraine, and the Czech Republic on climate-change issues, including emissions trading, Joint Implementation, national, regional, and local climate strategies, and GHG inventories. Some projects are funded by the U.S. EPA (please see the section U.S. assistance), and some activities in Poland were funded by the Dutch government (please see the section on the assistance from the Netherlands).

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3.3.2 World Resources Institute

The World Resources Institute (WRI) is an environmental think tank based in Washington, D.C. WRI's main projects that support capacity building related to climate change are:

- Capacity for Climate Protection, a joint three-year project with the Regional Environmental Center to assist Central and East European country efforts to find less emission-intensive development paths and create policy and institutional frameworks needed to comply with the UNFCCC and Kyoto Protocol, and
- SafeClimate.net, which engages visitors with interactive tools and informative content, helping people understand their contribution to greenhouse gas emissions.

The Capacity for Climate Protection project in the EIT countries has just been completed. It comprised a research aspect (case studies on JI, national systems, policies and measures, and public participation), as well as an outreach aspect involving a network of NGOs. (Please see the project description under the REC, below).

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3.3.3 Regional Environmental Center for Central and Eastern Europe (REC)

The REC is a non-advocacy, not-for-profit organisation with a mission to assist in solving environmental problems in Central and Eastern Europe. The REC has its head office in Szentendre, Hungary, and country offices in 15 Central and Eastern European countries. The REC currently runs several programs that include a capacity-building component. Its Climate Change Program provides capacity building on climate change. It focuses on assisting countries from Central and Eastern Europe in identifying policies and measures to comply with and respond to opportunities created by the Framework Convention on Climate Change and the Kyoto Protocol. For three years (1999-2002) this program has been supporting the Capacity for Climate Protection project. The project has been funded by the Japan Special Fund, the European Commission DG ENV, the US EPA, the Italian Ministry for Environment and Territory, and the Dutch Ministry of Housing, Spatial Planning and the Environment.

Main objectives of this program are:

- To broaden the constituency for climate protection in Central and Eastern European Annex I countries
- To support these countries in building their institutional capacity to meet the challenges and use the opportunities of the Climate Convention and the Kyoto Protocol.

In the course of the project several case studies were developed by Central and Eastern European (NGOs). The objective of the case studies was to draw lessons from CEE experience with AIJ projects and inform climate change policy-making. These case studies illustrated the importance of good governance for successful market programs.

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3.3.4 WWF

In the EIT region, WWF is active in Poland and Russia on climate change issues. The main focus of WWF's activities related to capacity building for climate change policy development in Russia is education and outreach on climate change issues, international flexibility mechanisms, and necessary country response to the global challenge of climate change. WWF also provides methodological and technical assistance to Russia in formulating domestic climate policies and in preparing for participation in the Kyoto Protocol. For example, WWF-Russia is an active participant in the US EPA-funded activities on developing regional GHG inventories. In Poland, WWF focuses on promoting renewable energy.

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The table below illustrates the distribution of capacity building assistance in the EIT region by program area (it might not include all existing programs and activities).

	Canada	NL	US	Finland	Sweden	Japan	Nordic reg. orgs	BASREC	EC	EEA	WB NSS	PCF plus UNDP-GEF	IPCC	UNITAR	OECD/IEA	REC	CCAP	WWF	CAN-Europe
JI and other project activities	X	▲	X	X	X			X	X		X	X			X	▲	▲		
Emissions Trading			X					X	■						X		X		
GHG Inventory			X						■	X			X	X	■		X	X	
Registry														■	X				
General training and awareness building						X	X									▲	X	X	X
X	On-going																		
■	Planned																		
▲	Interrupted or at the completion stage																		

4. Remaining Capacity Building Needs

It is clear that all essential areas of climate change policy development, including JI, emissions trading, GHG inventories, and national registries, require additional attention and investments of human, financial and technical resources.

The list of capacity needs in the EITs is known:

- ❖ Establishment or strengthening institutions at the national level to co-ordinate and guide activities for climate change policy development and implementation (including national systems for data collection and verification, national GHG registries, and JI units);
- ❖ Transfer of methodologies and know-how on monitoring and data collection, data quality assurance and control;
- ❖ Methodological and legislative assistance on emissions trading and JI, including such assistance with respect to accession issues;
- ❖ Public awareness support;
- ❖ Education of local government and industry stakeholders and support for dialogue among various stakeholders;
- ❖ Awareness raising among government officials and parliamentarians
- ❖ Training of local experts.

The EIT countries and foreign assistance institutions should join their forces to build the necessary infrastructure that will enable successful participation of the EITs in the Kyoto protocol and its Mechanisms.

It is crucial that the EITs create conditions that would be conducive to the success of technical assistance efforts. The first step in this direction would be a clear division of responsibilities among all institutions involved in climate policy development. Without a precise designation of authority the effectiveness of the assistance will suffer.

Another important step for the EITs would be to make an effort and come up with their own initiatives. Such initiatives could include the development of strategies and action plans to consolidate various resources for the development of the basics of climate policies, development of strategies and criteria for JI project identification and selection, etc. The governments should strive to launch a legislative process that would promulgate those policies.

In many EITs that are planning to participate in JI and international emissions trading, the private sector is going to be one of beneficiaries of these flexibility mechanisms. EIT governments should try to find ways to involve the private sector (with its financial and human resources) in the development of national systems that a country needs to participate in the Mechanisms. For example, many local government and industry stakeholders do not understand the importance of the national inventory to their future involvement in the Mechanisms (eligibility for international emissions trading, 1st or 2nd track JI). Engaging and educating them on these issues may lead to further mobilisation of in-country financial resources.

The donor community, for its part, should also take steps to boost the efficiency of technical assistance programs. These steps could include:

- More strategic but flexible assistance (targeted to specific needs but flexible in its approach, timing and criteria for capacity building projects preparation and approval).
- Designing several large multi-year programs rather than many small and short projects. This will not only assist the countries better but will also save time and money for people preparing and evaluating numerous project proposals¹⁴.
- Ensuring co-ordination between donor agencies before they engage in a capacity building effort in order to avoid duplicating activities. There is no need to conduct needs assessment every time when an agency wants to provide assistance. It would be more efficient to use already available studies conducted beforehand. It might be useful to develop a web-based or actual capacity building clearinghouse and co-ordination centre (where all interested parties can receive information, request assistance, co-ordinate their efforts, etc.).
- Encouraging local initiation and requests for assistance. The assistance will be most effective when it complements in-country efforts to address a specific issue of climate change policy development. In this case, in-country stakeholders lay out the foundation of a project, and local resources are mobilised to work on this specific issue. It might also be helpful if assistance could be provided to the EITs in developing applications for assistance. Since many EITs, especially small countries, do not have staff resources to attend to even most pressing needs, they often lack capacity to apply for assistance even when assistance is available.

¹⁴ Some small projects could also be very useful, but their effectiveness will suffer without planned follow-up activities.

5. List of Abbreviations

AIJ	Activities Implemented Jointly
BASREC	Baltic Sea Region Energy Co-operation
CCAP	Center for Clean Air Policy
CCI	Climate Change Initiative Center in Kiev, Ukraine
CDM	Clean Development Mechanism
CIDA	Canadian International Development Agency
DOE	U.S. Department of Energy
EEA	European Environment Agency
EIT	Economies in Transition
EPA	U.S Environmental Protection Agency
ERU	Emission Reduction Unit
ERUPT	Emission Reduction Unit Procurement Tender
EU	European Union
GHG	Greenhouse gases
GEF	Global Environment Facility
IEA	International Energy Agency
IETA	International Emissions Trading Association
JI	Joint Implementation
NEFCO	Nordic Environment Finance Corporation
NGO	Non-governmental organisation
NSS	National Strategy Studies
OECD	Organisation for Economic Co-operation and Development
PCF	Prototype Carbon Fund
PNNL	Pacific North-West National Laboratory
REC	Regional Environmental Center for Central and Eastern Europe
UNDP	United Nations Development Program
UNITAR	United Nations Institute for Training and Research
UNFCCC	United Nations Framework Convention on Climate Change
WRI	World Resources Institute
WWF	World Wildlife Fund

6. Bibliography

- A. Buchman et al, Complying with the Kyoto Protocol Requirements: Capacity Needs in Central and Eastern Europe, WRI, REC, 2001
- A. Arquit Niederberger, E. Graf, Mid-Term Evaluation of the World Bank National Strategy Studies Program, 2001
- Best Practices for EPA's International Capacity Building Programs, U.S. EPA, 1999
- Decision 3/CP 7: Capacity Building in Countries with Economies in Transition, UNFCCC, 2001
- E. Levina, Climate Change Policy Development in Ukraine: An Institutional Assessment, CCAP, 1999
- J. Jilkova, Domestic Emissions Trading System in the Czech Republic: Options for an Implementation Framework, OECD, 2001
- J. Kiarer et al, Synthesis Study of the National AIJ/JI/CDM Strategy Studies Program, World Bank, 1999
- M. Leneva, Possible Approaches and Next Steps for the Development of National Inventory System in the Russian Federation, OECD, 2002
- Personal communication with Daniela Stoycheva, Bulgaria
- Personal communication with Henneke Sikkema, the Netherlands
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- Proposal for a Directive on Establishing a Scheme for GHG Allowance Trading within the Community, 2001/0245 (COD)
- S. Legro, Climate Change Policy and Programs in Russia: An Institutional Assessment, PNNL, 1999
- V. Peeva, Development of a National Registry in Bulgaria: Options and Recommendations, OECD, 2001
- Z. Guziova et al, Country Capacity Development Needs and Priorities Regional Report for Eastern Europe and Central Asia, CDI, GEF-UNDP, 2000

Annex A.

Workshop Agenda

National Systems for Flexible Mechanisms:

Implementation Issues in Countries with Economies in Transition

Workshop 13-15 May 2002

REC, Ady Endre u. 9-11, Szentendre, Hungary

Workshop Chair: Enno Harders, Germany

May 13

Key Elements of National Policy for the Implementation of the Flexible Mechanisms **Rapporteur:** Richard Baron, IEA

Opening by Mr. Tibor Faragó, Ministry for the Environment, Hungary

Welcoming remarks, Enno Harders, Workshop Chair

Key national systems in the context of a broader climate policy perspective
Jürgen Lefevere, FIELD

The climate process from the perspective of EIT countries
Visnja Grgasovic, Croatia

Investors' Perspectives on Joint Implementation

Frede Cappelen, Statoil

Adriaan Korthuis, Carboncredits

Frank Joshua, Natsource

Patrick Nollet, Entreprises pour l'environnement

Round-table: Key elements

Clear policy objectives and priorities for actions are needed in order to have an effective and timely implementation process of climate policies at the national level. The discussion in this round-table will draw on the early presentations and is expected to set the scene for the working groups. More specifically, the discussion should examine the role of and interactions between various key national systems and programs (e.g. GHG inventory systems, registry systems, emissions trading systems and national programs for JI) within a broader range of processes and policies to address climate change at national level.

Wrap-up by the chairman

The wrap-up session is expected to set the objectives for the working groups in the following day.

May 14 Involvement of Key National Stakeholders in Priority Setting

Parallel Working Groups

Group 1: National systems for GHG inventories**Chair:** Katarina Mareckova, Slovakia**Rapporteur:** Stéphane Willems, OECD**Presentations:**

- *Requirements for preparing and reporting GHG inventories under the Convention and the Protocol*, Roberto Acosta, UNFCCC
- *Setting priorities when establishing national inventories*, Anke Herold, Germany
- *Possible approaches and next steps for the development of a national inventory system in the Russian Federation*, Vladimir Berdin, Russia

Group 2: Domestic emissions trading systems**Chair:** Oleg Pluzhnikov, Russia**Rapporteur:** Robert Dornau, IETA**Presentations:**

- *Establishing a European Trading System*, Peter Vis, EC
- *Domestic emissions trading system in the Czech Republic: options for an implementation framework*, Jirina Jilkova, Czech Republic
- *Discussant: Steve Drummond, CO2e.com*

Group 3: The role of national registries**Chair:** Jonathan Pershing, IEA**Rapporteur:** Anca-Diana Barbu, OECD

- *National registries in the framework of the Kyoto Protocol*, Andrew Howard, UNFCCC
- *The role of national registries*, Jeremy Schreifels, USEPA
- *Development of a national registry in Bulgaria: options and recommendations*, Valya Peeva, Bulgaria
- *Discussant: Heneage Legge-Bourke, CDC-IXIS*

Group 4: Joint implementation**Chair:** Maciej Sadowski, Poland**Rapporteur:** Jane Ellis, OECD**Presentations:**

- *National frameworks for joint implementation in EIT countries*, Fiona Mullins, ERM
- *Making JI finance work; a business perspective*, Paul Bodnár, Vertis Environmental Finance
- *Discussant: Ingrida Apene, Latvia*

Plenary session (*wrap-up session with session chairs*)**Chair:** Enno Harders, Germany

During the plenary session, the session chairs will make a 15 min presentation each summarising the findings from all 4 groups by theme.

Questions and clarifications

May 15 **Capacity Building: Issues and Initiatives**

Co-chair: Andrei Marcu, IETA

Presentation: Capacity building - issues and initiatives

Ellina Levina, Independent Consultant

The presentation will draw on a background paper that provides an overview of various on-going or planned capacity building initiatives in EIT countries that are relevant to the workshop themes (national systems for GHG inventories, emissions trading, joint implementation and national registries).

Round-table

Panel: Harro Pitkänen, NEFCO; Mitsutsune Yamaguchi, Keio University,
Tomas Chmelik, Czech Republic

The session aims to provide recommendations on priorities for development of these national systems within EIT countries. Moreover, the session will strive to provide recommendations on how internal and external resources could be used efficiently to meet the capacity building needs of the EIT countries.

The lead presentation as well as the recommendations from the working groups is expected to provide clear guidance for the discussion. The discussion should address the challenges that EIT countries are likely to face when implementing key national systems to mitigate climate change and accordingly highlight areas where there is need for sustained capacity building efforts. The discussion is expected to indicate whether the existing capacity building initiatives are likely to meet the needs of the EIT countries, where there are clear gaps in resources and priorities for addressing them.

Wrap-up by the session chairs

Closing remarks: Enno Harders, Workshop Chair

Annex B.

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