



DISCUSSION PAPER

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Abstract

The countries wishing to join the EU have a high potential for low cost greenhouse gas emission reduction. As they cannot join the “bubble” agreement for the first commitment period of the Kyoto Protocol, project-based Joint Implementation (JI) could be a powerful strategy to integrate accession countries into an overall EU climate policy strategy. An important question in this context is whether the “acquis communautaire” will be used to define the baseline for the calculation of emission reductions from JI projects. A problem is that the grace periods for several environmental sectors, e.g. for application of the IPPC directive, differ considerably among countries. The EU should help accession countries to establish a predictable legal framework on which to base JI preventing in this way the current legal uncertainty regarding procedures of JI. Moreover, it should aim at an early implementation of the monitoring guideline and couple it with technical assistance. This would allow to build strong inventory systems in the accession countries and thus avoid the risk that JI is restricted to the second, strongly supervised track.

Zusammenfassung

In den Ländern, die der EU in den nächsten Jahren beitreten wollen, gibt es ein erhebliches Potenzial kostengünstiger Maßnahmen zur Treibhausgasverringerung. Da die Beitrittsländer der EU-Zielgemeinschaft für die 1. Verpflichtungsperiode des Kyoto-Protokolls nicht beitreten können, könnte projektbasierte Joint Implementation (JI) eine wichtige Strategie zur Integration dieser Länder in eine EU-weite Klimapolitikstrategie sein. Eine wichtige Frage ist in diesem Zusammenhang, ob der „Acquis Communautaire“ die Referenzfälle für die Berechnung der Emissionsverringerung aus JI-Projekten bestimmt. Problematisch hierbei ist, dass sich die Übergangsperioden für verschiedene Sektoren, z.B. für die Anwendung der IVU-Richtlinie, zwischen den Ländern erheblich unterscheiden. Die EU sollte den Ländern bei dem Aufbau eines Rechtsrahmens für JI unterstützen, um die derzeitige rechtliche Ungewissheit zu beseitigen. Außerdem sollte sie eine frühzeitige Umsetzung der Berichterstattungs-Richtlinie anstreben und dies mit technischer Hilfe verknüpfen. Somit könnten gute Inventarsysteme aufgebaut werden und ausgeschlossen werden, dass JI auf den zweiten, kontrollintensiven Weg eingeschränkt wird.

1 Introduction

Since 1998 the EU is negotiating accession with a large number of countries. Substantive negotiations on accession were set up with Cyprus, the Czech Republic, Estonia, Hungary, Poland and Slovenia, the so-called “first wave” countries, plus Malta. The so-called “second wave” countries (Bulgaria, Latvia, Lithuania, Malta, Romania, Slovakia) have not commenced substantive negotiations with the EU this time. For the first wave countries 2003-2006 would be an achievable date for accession. For the second wave countries 2005 until the end of the decade seems to be most likely. It has to be noted that the European Commission has not committed itself to any end-date for the enlargement process and the official line is that countries will not necessarily join in waves. Currently, billions of Euro in accession funds are flowing eastwards.

The enlargement process of the European Union towards Central and Eastern European Countries (CEECs) involves two major new challenges compared to the last accession processes: financial assistance and the question of verification of the implementation of the Community *acquis* –the established institutional and regulatory framework at the EU level¹.

For those not familiar with the enlargement processes of the European Union, it is important to point out that in contrast to the previous enlargements where the adoption of the *acquis communautaire* was just a condition for accession, within the accession of CEECs to the EU the implementation of the *acquis* is going to be verified before accession can take place². To such an end, yearly the European Commission undertakes an assessment of the degree of compliance of the *acquis communautaire* by the different CEECs focusing on every of the 30 negotiation chapters of the Europe Agreements, which are the first legal instruments of approximation. Within each of the Europe Agreements, clauses referring to the need for the approximation of environmental legislation, as well as clauses giving a more precise definition of co-operation on the environment are contained. From this last perspective global climate change has been formally integrated as one of the objectives of the referred co-operation (art. 79 of the Europe Agreement-Hungary; art. 81 Bulgaria; art. 83 Latvia). However, de facto

¹ For a deep analysis on the specificities, obstacles and eventual solutions of the accession of Eastern and Central States to the EU, see Alan Mayhew, *Enlargement of the European Union: An Analysis of the Negotiations with the Central and Eastern European Candidate Countries*, Working Paper N. 39, Sussex European Institute, 2000.

² Id. page, 10

integration has not happened so far. We discuss the potential of project-based co-operation between the EU and accession countries under the frame of “Joint Implementation” (Art. 6 of the Kyoto Protocol).

2 Emissions forecast and reduction costs in accession countries

While marginal abatement costs in the EU15 are often estimated to be in the triple digit \$/t CO₂ range, marginal costs in accession countries will be often negative or in the low single or double digit-range¹. According to a study from the Polish Academy of Science in 1993 for instance, the “no regret” potential for Poland was estimated to be around 398 million t CO₂ by 2010² (Karaczun 1996, p. 41).

Eastern Europe has played an important role during the AIJ pilot phase. The Baltic states Latvia and Estonia head the list of host countries as far as the number of projects is concerned. The success rate of projects in eastern Europe has been much higher than in the average of the AIJ programme. However, experiences in Eastern Europe also show that transaction costs of projects can become very high and that host country lack of institutions can severely hamper the process³.

One of the most successful AIJ programmes has been the Swedish programme in the Baltic. Sweden concentrated on easily replicable projects of few, clearly defined types that were also economically attractive⁴. Reporting was centralised and transparency very high with the programme being the only one reporting to the UNFCCC secretariat fully on time. The Swedish also experimented with different baseline approaches and were among the first to use a country-wide benchmark. Another feature of success was the good integration of host country consultants which led to strong capacity building. Nevertheless there was a lack of spreading the AIJ experience to local decisionmakers and no documents in local languages were available. Astonishingly, also no institutional

1 See e.g. for options in Slovakia, Study on Slovak Strategy for GHG Reduction World Bank 1998b, p. 67; for marginal costs in the Czech Republic A national Strategy for Joint Implementation in the Czech Republic, World Bank 1998a, p. 42ff.

2 Zbigniew Karaczun, Independent NGO Evaluation of National Plans for Climate Change Mitigation. Central Europe, Brussels, 1996, p. 41

3 Regional Environment Center; World Resources Institute, Capacity for Climate Protection in Central and Eastern Europe, Activities Implemented Jointly, Budapest, 2001.

4 Axel Michaelowa, Review of Reports on Activities Implemented Jointly (AIJ) under the Pilot Phase with a Specific Focus on Baseline and Additionality Issues: Lessons Learned and Recommendations Regarding Practical Options, Study for UNFCCC Secretariat, Bonn, 1999.

structures in the host country were built up – the approval was done by officials whose responsibilities extended far beyond AIJ at the ministries of environment.

**Table 1: Greenhouse gas emission characteristics of EU accession countries
(million t CO₂ equivalent)**

Country	1990/ Base year*	1998 *	Kyoto target	2010 projections	Difference to target
First wave					
Cyprus**	4.6	6.2	-	n.a.	n.a.
Czech Republic	192.1	147.8	176.7	164.9 to 174.9	-1.8 to -11.8
Estonia	40.7	21.8	37.4	17.0	-20.4
Hungary	101.6	82.7	95.5	93.0	-2.5
Poland	564.3	402.5	541.7	429.0 to 502.0	-39.7 to -112.7
Slovenia***	19.2	20.1	17.7	n.a.	n.a.
Malta**	2.5	2.9	-	n.a.	n.a.
Wave I	925.0	684.0	869.0	703.9 to 786.9	-74.4 to -147.4
Second wave					
Bulgaria	136.1	83.7	125.2	115.7-138.6	+13.4 to -9.5
Latvia	35.7	11.5	32.8	20.1	-12.7
Lithuania	51.5	23.9	47.4	42.2-59.1	+11.7 to -5.2
Romania	264.9	164.0	243.7	242.4 to 277.8	+34.1 to -1.3
Slovakia	72.5	52.7	66.7	64.6 to 67.0	+0.3 to -2.1
Wave II	560.7	335.8	515.8	485.0 to 562.6	+46.8 to -30.8
First and Second wave					
Wave I + II	1486	1020	1385	1189 to 1350	-27.6 to -178.2

* CO₂, CH₄, N₂O, million t CO₂ equivalent, excluding land use and forestry

** CO₂ from fuel combustion only. These islands are not members of Annex I, cannot implement JI and thus will not be discussed further.

*** data for Slovenia: personal communication Hydrometeorological Institute, Ljubljana, for 1997.

Sources: Data from UNFCCC (2001), Betz et al. (1999), Kallaste et al. (1999)

3 Experiences during the AIJ pilot phase

A contrast to the Swedish experience was the U.S. AIJ project in Decin in the Czech Republic which entailed a lignite-to-gas switch in a municipal district heating plant. It was the first AIJ project of all and started in 1994. The U.S. investors were very eager to

specify carbon credits in the contract despite the fact that AIJ should not lead to credits. Due to the health problems linked to the heavy lignite use in place at the time, the mayor of Decin city was very eager to promote the project and gave a letter of approval; a signing ceremony with the deputy U.S. Minister of energy followed. However, the mayor failed to inform the Ministry of Environment which was very angry and would almost have blocked the project when it asserted the competence for final approval. As a consequence, for several years no further AIJ project was approved by the Czech Authorities.

An interim case is Poland which quickly set up an AIJ office and a detailed set of criteria. This apparently deterred investors and only a few projects were implemented.

Table 2: Accession countries hosting AIJ projects

Country	Number of projects
Latvia	25
Estonia	21
Lithuania	9
Czech Republic, Hungary, Romania, Slovakia	4
Poland	3
Bulgaria	1

Source: UNFCCC (2001)

The types of projects and overall reductions can be found in the table below:

Table 3: Project types in AIJ in accession countries

Project type	Total reduction (Mt CO ₂)	Average lifetime (years)	Annual reduction (Mt CO ₂)	Number of projects ¹
Forestry	9.83	15.0	0.66	1
Fuel switch	8.82	14.6	0.60	7 (2)
Fugitive gas capture	n.a.	n.a.	n.a.	0 (1)
Energy efficiency	2.51	10.1	0.25	34 (3)
Renewables	2.09	11.1	0.19	28
Sum	23.25	11.0	1.7	70 (6)

¹: Projects in brackets have not reported any data.

Source: Own calculations on basis of data from UNFCCC (2001)

4 Early JI experiences

After the Swedes, the Dutch were the most active AIJ investors in Eastern Europe and quickly developed plans to go beyond AIJ. In 1999, they unveiled ERUPT, the ERU Purchasing Tender. Due to a particular legal interpretation, the Dutch government was of the opinion that private companies could not own ERUs. Thus an elaborate procedure was set up where the government issued a global tender for ERUs. These were to come from JI projects and a necessary condition was a framework agreement between the host country and the Netherlands. These agreements specified that the host country government would transfer ERUs equal to the emission reduction achieved by the private projects during the first commitment period.

The necessity to negotiate the framework agreements was an important step in capacity building. The Netherlands supported this by financing JI offices in Bulgaria and Romania. The first tender allocated money to five projects all of which are located in accession countries. Three are situated in Romania, and one each in the Czech Republic and Poland. Astonishingly, Bulgaria did not get a single project.

Table 4: Characteristics of ERUPT projects

Country	Framework agreement	Project funding (M€)	Overall amount of ERUs (1000 t CO ₂ equivalent)
Croatia	✓	-	-
Czech Republic		4.7-10.8	522-1200
Bulgaria	✓	-	-
Poland	✓	5.3	584
Romania	✓	25.4	3072

Source: www.senter.nl/erupt

5 Is Climate Change integrated within the EU enlargement strategy?

While the EU bubble cannot be changed for the first commitment period, it is possible to use the Kyoto Mechanisms for a co-ordinated strategy to integrate the accession countries. Despite having incorporated environmental policies within the EU Agreements, the EU has not undertaken a real strategy –either regulatory or financial– focused on climate change policies in CEECs. The EU disregard over climate change is evident considering for instance the Guide to the Approximation of European Union Environmental Legislation where climate change does not appear as an individual chapter. Likewise, in the yearly assessments undertaken by the EU Commission of

CEEC approximation towards the EU *acquis*, climate change policies are rarely reported by CEECs. From this perspective it is not surprising that Joint Implementation has been out of the EU agenda up to recently. Most probably, one of the reasons for the absence of a climate change policy strategy regarding enlargement is the relative novelty of EU climate policies at least compared to other well developed areas, such as water and waste policies. In addition, the absence of discussions on the potential of Joint Implementation has much more to do with the policy style regulation that has characterised so far the EU environmental policy. Indeed, JI can be included within the category of environmental economic instruments. However, during the accession negotiations between the EU and accession countries the EU ignored environmental economic instruments as tools to implement the environmental *acquis* in accession countries. Rather during the pre-accession period emphasis has been put on the traditional command and control approach that has until recently been the approach followed by European environmental policy¹. Yet environmental economic approaches -among which Joint Implementation is included- have recently been embraced by the EU in the context of climate policies, what implies a change of philosophy within the EU environmental policy approach. Undoubtedly, this change of policy instruments will have an effect on the implementation of the environmental *acquis* by CEECs, providing CEECs with a major legitimacy for adopting environmental economic instruments, such as JI. Nevertheless, the EU should embark on a more active approach encouraging CEECs to adopt economic instruments. Thus a basic step both for the EU and CEECs would be the elaboration of a EU-CEECs strategy for the development of JI.

5.1 Joint Implementation as a Policy Enlargement Instrument

The recent interest revealed by the EU –and some of its member states- regarding the possibility of using project based mechanisms –and particularly Joint Implementation- in the context of EU climate policies might become one of the most promising tools in the context of the enlargement process. Yet and stemming from an European perspective, the development of JI projects in CEECs will reveal the different and to a certain extent competing interests of participating actors, namely, the European Union,

¹ Regional Environmental Center, Source Book on Economic Instruments for Environmental Policy in Central and Eastern Europe, Sofia Initiative on Economic Instruments, April 1999, Sofia, p. 7: “Current EU environmental legislation is dominated by C&C measures. The accession negotiation center on those and seem to leave little room for flexible mechanisms “While official documents often refer to environmentally charges as possible instruments to address EU approximation financial needs, few mention the use of economic instruments in a flexible manner that would reduce implementation costs through directive incentive impacts”.

the Member States and CEECs. In theory, the major opposing interests appear between Member States (investors) and CEECs (host countries)¹. Through JI Member States pursue to accomplish their commitments with art. 3 of the Kyoto Protocol. CEECs as host countries will intend to solve environmental problems and to implement a new development strategy with the invested capital. The EU itself has on the one hand an interest in achieving its commitment targets under the bubble and on the other hand aims at pushing CEECs to the adoption of the *acquis communautaire* and its parallel increase of environmental and development standards. Despite these theoretical conflicting interests, it is obvious that the advantages of the process of EU enlargement will bring about positive results to all actors. In this respect, the Joint Implementation mechanism contains particularities –increase of environmental and development standards as well as financial transfers- that make it particularly apt for furthering the enlargement process, and as such the EU should take advantage of the properties of the JI mechanism so as to squeeze its “plus points”.

From a political point of view, Joint Implementation might become an asset for the EU enlargement. Joint Implementation within the context of the European Integration and Accession Process should be used as a double-edged sword strengthening the accession process on both sides. By contributing to the achievement of EU environmental goals JI firstly increases the degree of certainty about enlargement by accession countries and also enhances the confidence of EU countries on the implementation by accession countries of the *acquis communautaire*. Equally, given its character of public/private projects JI might foster private/public partnership.

Thus, because the EU has not put a deep emphasis on this area within the accession negotiations, climate change has been also seen a low priority in CEECs countries. A positive attitude from the part of EU institutions towards JI might accelerate the until now insufficient government activity in CEECs in the sphere of JI.

¹ See Marcus Stronzik, Joint Implementation-Investors and Hosts- Reconciliation of Differing Interests, in Emissions Trading and Joint Implementation as a chance for the CEECs, Federal Ministry for the Environment Nature Conservation and Nuclear Safety, 2001, p. 131 on the issue of conflicting interests between host and investor countries. Maria Khovanskaia, JI and Business Involvement in CEE, Workshop of JI experts, REC 18-19 April, 2001, p. 3. “There is a critical trade-off between procedures, which are more attractive to investors, but offer less environmental security”.

5.2 The advantages of incorporating the *acquis* within JI projects

Apart from the benefits that the incorporation of JI as a tool to improve the environmental *acquis* produces in the enlargement process, other gains might be derived. For the reason that the adoption and implementation of the *acquis* entails to improve domestic legislation that increases legal certainty for investors. Basic issues for the development of JI projects from an investor point of view, such as contract enforcement, will be also strengthened by the incorporation of the *acquis* what will ensure the JI projects¹. Finally, it should not be ignored that although the adoption by CEECs of the *acquis communautaire* implies financial costs, the benefits that the EU environmental regulations will provide to accession countries can be measured not only from an environmental quality perspective but also in economic terms, since quite often the hidden effects costs to the economy caused by lower environmental standards through a loss of output and inefficient production have not taken properly into account². Thus, the financial gains of the adoption of the *acquis communautaire* might be superior to those derived from a poor implementation of JI in CEECs.

Regarding financial constraints, there are no doubts that the monetary needs derived from the implementation of the *acquis* are thus added to those financial needs necessary to put in place regulatory and administrative frameworks for the implementation of JI projects in EEC countries³. Nevertheless one should bear in mind that candidate countries are not against introducing stricter environmental standards, it is simply that this has to go along with responsible financial planning. In this respect, certain countries have manifested their preference for Joint Implementation over emissions trading because of the environmental goals of the project mechanism⁴. Thus because of its transfer finance nature, JI might serve to overcome those financial constraints. Given

1 On this subject see EBRD, *Law in Transition: Contract Enforcement*, European Bank for Reconstruction and Development, London, 2001.

2 On the different economic and monetary benefits of implementation of the *acquis communautaire* see EU Commission, *The Benefits of Compliance with the Environmental Acquis for the Candidate Countries*, Final Report, DG Environment, European Commission, Brussels, 2001.

3 For an overview on the environmental financial needs of candidate countries, see EU Commission, *The Challenge of Environmental Financing in the Candidate Countries*, COM (2001) 304 final, 8.6.2001.

4 "Latvia will focus on JI instead of ET because of environmental benefits. By definition JI necessitates an investment project that will help alleviate an environmental problem. Emissions trading only results in revenue for the government in exchange for emissions allowances. Thus there is no environmental effect unless this revenue is tied to environmentally friendly expenditures" , Aivars Jurjans, [Country Report: Latvia] in *Emissions Trading and Joint Implementation as a chance for the CEECs*, Federal Ministry for the Environment Nature Conservation and Nuclear Safety, Bonn, 2001, p. 111.

that the Commission's 1998 Communication on Accession Strategies for the Environment required Candidate Countries to develop investment strategies for the implementation of the *acquis communautaire*, along with their legislative approximation strategies, JI should be integrated by CEECs in their EU accession strategies as ways not only to achieve the *acquis* requisites but also as mechanism for facing their large financial constraints. Hence, by setting an appropriate national JI model, CEECs might use JI investments for attaining economic development and environmental objective related with EU accession.

5.3 Obstacles to the implementation of the *acquis*

EU member states –and eventually the EU as a party to the Convention- will naturally have a tendency to invest on JI projects in CEECs. As stated before, the development of JI projects in CEECs might be influenced to a large extent by the body of law that accession countries might implement as a condition for their accession. Foremost, CEECs should consider the legal and future developments occurring at the EU level regarding climate change policies¹. In addition, a quite large amount of EU legislation already in place- mainly environmental, energy policies and internal market policies- might shape the implementation of JI in Eastern European countries. The task of clarifying which and to which extent EU legislation might mould the JI in CEEC countries becomes a primary task for those countries. However, to draw a general picture of the juridical framework relevant for the development of JI projects appears complicate. For instance, the environmental *acquis*, deemed as one of the areas which will likely influence more the design of JI projects appears as one of the hardest chapters since environmental policy regulations have extraordinarily increased in recent years becoming one of the EU most extensive areas of laws². From a CEEC perspective the transposition into their legal systems of the environmental *acquis* is a demanding task. Thereby, CEECS face the transposition of a huge amount of environmental regulations existing at the EU and furthermore CEECs must consider the ongoing and expanding legal developments in the area of environmental law at the EU level. First, as suggested above, certain areas of EU regulation such as environmental law represent a vast body of law, evolving every day due to ongoing reviews and new regulatory

1 Axel Michaelowa and Regina Betz, Implications of EU Enlargement on the EU Greenhouse Gas Bubble and Internal Burden Sharing, *International Environmental Agreements: Politics, Law and Economics*, 2001, p. 267-279.

2 See 1. European Parliament, Environmental Aspects of the Enlargement Negotiations of the Committee on the Environment, Public Health and Consumer Policy, European Parliament, Brussels, June 2000.

frameworks. To those facts, one should add that most of the CEECs have obtained during the negotiations with the EU, transitional and derogation periods for certain areas and for certain regulations¹. These differ strongly between countries.

Table 5: Transition periods for different countries concerning IPPC and waste management

	IPPC	Waste management
Bulgaria*	requested	requested
Czech Republic	-	urban waste water 2010
Estonia	-	urban waste water 2010
Hungary	-	urban waste water 2015
Latvia*	requested	requested
Lithuania	-	urban waste water 2009
Poland	2010	landfills 2012 urban waste water 2015
Romania (not opened yet)	NA	NA
Slovenia	2010	urban waste water 2015
Slovakia*	requested	requested

* negotiations not yet closed

Source: europa.eu.int/comm/enlargement/poland/chap22/index.htm

Transitional periods for EU legislation transposition in accession countries will thus have an effect on JI projects. For example, the amount of Emission Reduction Units (ERUs) in the waste management JI project of the Prototype Carbon Fund in Latvia critically depends on the transitional period for the landfill directive.

5.4 The *acquis* affecting the development of JI

To offer a general picture of the national CEEC policies regarding JI projects represents a complicated task. First of all, institutional and regulatory frameworks change from country to country. Also their regulatory frameworks and their national environmental legislation suffer ongoing developments as long as they implement EU regulations in

¹ To notice that transitional measures do not relate to new installations in line with EU position that all new investments should comply with the environmental *acquis*.
From the perspective of the environmental *acquis*, most of the environmental transitions and derogations are simply due to the financial implications that the transposition of EU imposes on accession countries, being the objective of such countries the improvement of their environmental conditions.

view of a future accession¹. Without doubts those factors will have repercussions on the institutions and criteria on which CEECS will base JI.

Although our intention is to present some of the *acquis* which might be relevant for JI it is not intended to offer an exhaustive view. Although the environmental *acquis* remains one of the key fields one should not ignore that other *acquis* areas, mainly, the energy EU, competition and state aid and internal market policies that will be integrated by CEECs during the pre-accession periods and consequently will likely determine the development of JI projects. Furthermore it should be noticed that a future development of JI within the EU member states would be subject to this same *acquis*.

The amount of emission reductions generated by JI crucially depends on the baseline. Under the first track of JI, countries are free to choose a baseline. In this case, the EU has to negotiate the baselines with the accession countries. It would make sense to either apply CDM methodologies or to develop a common approach for all accession countries. This approach could be built on the *acquis communautaire*. Any standards and rules of laws included under the *acquis* would then be used to set the baseline. Obviously, accession countries might argue that the *acquis* is stronger than a situation without EU accession and thus try to create more ERUs as they try to be competitive in setting JI conditions. The question is whether there will be a race to the bottom in the setting of baselines in order to attract JI projects. If baselines are set up lower than the *acquis* in order to generate as many as ERUs as possible, that would imply for candidate countries to delay implementation of investment/heavy parts of the *acquis* till after 2007². But as suggested by certain authors, any “leniency in setting entity emissions constraints or project baselines will create domestic distortions because other sectors of the economy will have to do more in order for the country to meet its national target. It is therefore important for governments to be able to set realistic and fair emission targets and project baselines”³. Countries will thus not gain anything setting lax

1 For instance, Poland and Rumania have expressed that national circumstances and environmentally related legislation are changing rapidly in CEECs countries, particularly in countries planning to accede to the EU, and that this has implications for the institutional process and initial criteria set up to approve the AIJ/JI projects, OECD/IEA, Transition Country Perspectives on the Kyoto Protocol, , Paris, October 2000, p. 7.

2 Lowering baselines serves as a disincentive for investors to engage in necessary high-tech projects, if greater credits are available for low-tech investments.

3 Fiona Mullins, Capacity Needs of Central and Eastern Europe: An Assessment of National Systems for Reporting and Participation in the Mechanisms in Six CEE Countries, Environmental Resources Management, London, November 2000, p. 29. See also on general experiences of JI projects:

baselines as they have to make up the ERUs sold by additional domestic emission reductions. If the second track is used, the baseline rules as defined by the JI supervisory committee would have to be used. It is unlikely that they would accept anything laxer than the *acquis*.

Indeed, although CEECs will not in general face big problems in terms of their greenhouse abatement commitments in the near future, the situation may change. Actually, conditions of transparency and institutional stability will be more basic factors in order to attract investors than uniquely lowering baselines standards.

Stemming from the above considerations we will focus on the most relevant EU environmental legislation, as well as energy and interior market policies that CEECs might consider in developing their national JI strategies. In addition it will be provided a brief consideration of the eventual linkages between an EU Emissions Trading Program and Joint Implementation in CEECs.

5.4.1 IPPC Directive and BAT requirements¹

The IPPC Directive-Integrated Pollution and Prevention Control- (96/61EC) might be relevant for JI projects since one of its objectives rests on energy efficiency and the experience shows that many of the projects implemented under the JI in CEECs have concentrated on energy efficiency². The IPPC directive applies to a large number of projects, for instance energy projects and landfills. The interest of the IPPC Directive is also due to its coverage of emissions of greenhouse gases.

Christiane Beuerman, Thomas Langrock and Dr. Herman E. Ott, Evaluation of (non-sink) AIJ-Projects in Developing Countries, Wuppertal Institute, N. 100, January 2000.

1 Council Directive 96/61, 24 September 1996, OJ L 257/10/101996, P 0026-0040.

2 The IPPC directive is also intimately connected with the Emission Trading scheme advanced by the EU. Likewise, the UK scheme uses the IPPC directive to select the facilities and operators under the UK Emissions Trading Scheme. Still certain authors argue that the IPPC directive might not be appropriate for the setting of an Emission Trading Programme since the original purpose of the directive was not addressing greenhouse gases and climate objectives. In this sense, see Jos Cozijnsen, The Development of Post-Kyoto Emissions Trading Schemes in Europe: An analysis in the Context of the Kyoto Process, in Greenhouse Gas Market Perspectives, trade and Investment implications of the climate change regime, UNCTAD, 2001, p. 106. "Some members are of the opinion that emission trading is incompatible with IPPC because this directive obliges companies to install BAT in each unit ...further they fear that the company that innovates to come up with a new emissions-reducing technology can't claim that the resulting surplus allowances are surplus since, under the IPPC, the company should have been using the best technology anyway. The author finds that the IPPC is in fact not addressing greenhouse gases and climate objectives at all and is in need of reform".

The IPPC directive requires BAT (Best Available Technology) to control polluting releases to air, land and water. Art. 3 of the Directive requires that regulated processes use energy efficiently and that energy efficiency be taken into account when determining BAT. This element appears relevant in the context of JI projects based on energy efficiency and for the establishment of baselines. According to the Directive, each plant should dispose of a permit including emission limits for pollutants that are likely to be emitted from the installation in cause taking account of different factors like energy efficiency. But it is important to note that this directive does not contain fixed reduction targets. Rather the permit is negotiated between the administrative authority and the polluter on the base of BAT, taking account of economic, geographical and environmental conditions. That means that the permits will vary from operator to operator and from country to country depending on the way administrative authorities implement the concept of BAT¹. That is why it should be interesting to know the current practice in CEEC countries about the way they implement BAT (standardised like Germany or negotiated approach like in UK). The ambiguity of the Directive will lead to different solutions in different countries.

Since CEECs will be competent to define BAT this will affect the setting of baselines² as stated above.

While it remains to be seen the development that CEECs will undertake upon the IPPC directive and its BAT requirements, it should be interesting to consider the last developments of the EU Emission Trading Program, which sheds some light regarding the overlap between the IPPC and an Emission Trading Program³. The approach adopted by the EU in its last proposal for a Directive on ET within the EU proposes to modify the IPPC directive in such a way that “an installation covered by the emissions trading scheme should not have a limit set by its IPPC permit on its direct of emissions

1 See for an analysis of the legal requirements of the IPPC directive, N. Emott “An Overview of the IPPC directive and its Development”, p. 23-41 in *Integrated Pollution Prevention and Control, The EC Directive from a Comparative Legal and Economic Perspective*, Kluwer Law International, 1999.

2 Not all CEECs have practice in establishing Best Available Technology Requirements and risk management guidelines. For instance, in Poland only recently the Ministry of Environment has established a Working Group on Best Available Technology, which will constitute the basis for a future BAT unit. See EU Commission, Poland Regular Report 2000, Progress towards Accession, 8 November 2000.

3 This factor is important as far as JI and ET will be connected. For an analysis of the interlinkages between Emission Trading and IPPC directive see Adrian Smith and Steve Sorrel, Interaction between environmental policy instruments: Carbon emissions trading and Integrated Pollution Prevention and Control, University of Sussex-Science Policy Research Unit, Working Paper N. 27.

of carbon dioxide and other greenhouse gases insofar as they are covered by the emissions trading scheme, except insofar as these may have significant local effects”¹. However, regarding energy efficiency the proposal establishes that the IPPC provide a common framework which has been respected. Thus, Member States would be competent to determine the stringency of carbon dioxide abatement efforts that activities covered must achieve but as far as efficiency requirements for the use of energy efficiency are concerned the IPPC would provide minimum standards.

5.4.2 Environmental Impact Assessment Directive²

The procedural requirements of this Directive focus on diverse aspects of project development –from industrial to infrastructure projects- , and as such it will affect the development of JI projects. This directive also contains provisions related to public participation which would apply equally to JI projects. Clauses regarding public participation within this directive will be amended in order to incorporate the requirements of the Aarhus Convention on Public Information and Participation³. Most of CEECs have expressed a strong interest for the integration of the EIA Directive and some of them are already at the phase of its implementation.

Yet the EU EIA might not be completely pertinent for the development of certain JI projects. Indeed, a large amount of JI projects in CEECs countries focus on renewable energies and small scale projects. Although it has been a matter of discussions, renewable energy projects do not count according to the wording of the Directive with special procedures allowing for faster and simplified procedures. Some member States which have developed renewable energy strategies have created special and abbreviated procedures for promoting the development of renewable energies based on the environmental properties of the projects. CEECs should also consider the possibility of developing special EIA in the case of renewable energies and for small scale projects. Fast/track EIA procedures should be incorporated into the EU directive in order to legitimise JI projects also in EU countries keeping though the environmental guaranties provided by EIA procedures.

1 COM (2001) 581, p.9

2 Directive 85/337 OJ L 175 05/07/1985 p. 0040-0048 amended by Council Directive Directive 97/11.

3 Commission Proposal for a Directive COM (2000) 839, 18 January 2001.

5.4.3 Public Participation and Access to Information Directive¹

This directive is currently being reviewed in order to incorporate the legal requirements derived from the Aarhus Convention aiming at increasing transparency at the institutional level but also at the private level. Next developments of this Directive should be considered under the development of JI projects, even if many CEECs are already in quite advanced stages of implementing the Aarhus Convention into their legal systems.

5.4.4 EMAS Regulation²

EMAS is a voluntary scheme designed to promote on-going improvements of environmental performance and compliance with all relevant regulatory requirements regarding the environment. This scheme might be relevant for JI since it contains verification, reporting and accreditation requirements, as well as energy efficiency improvements at plant level³.

-Other relevant legislation are the Landfill Directive –reduction of biodegradable waste + methane/recovery; and the Large Combustion Plant Directive: (in case of cogeneration or fuel switching to achieve reduction targets).

5.4.5 Renewable Energy Policies

Not all the implementation of the *acquis* involves hard tasks for CEECs. To a large extent the adoption of the *acquis* will provide opportunities for CEECs in the context of JI. Such is the case with the EU policy on Renewable Energy. The EU will adopt a framework to promote the use of renewable energy and such legislation on Renewable Energy will be adopted by accession countries, which through recent privatisations in the energy sector, have adopted Energy laws supporting energy efficiency, and the use of renewable energy⁴. By requiring a 12% share of RE the EU *acquis* fosters indirectly

1 Council Directive 90/313 of 7 June 1990 L 158 26.06.1990

2 Council Regulation N.761/2001, 19.03.2001, OJ L 114/1 reviewing Council Regulation N. 1836/93, 29.06.1993 OJ L 168 29.06.1993.

3 The IPPC Directive, EIA and EMAS regulation contain common requirements which might affect the development of JI projects. See EU Commission, Impel Network, Interrelationship between IPPC, EIA, Seveso Directive and EMAS Regulation, December 1998.

4 As a country preparing for EU accession Hungary must gradually adopt the energy policy objectives of the EU. Amongst other, the two environmental objectives of promoting energy efficiency and

the development of JI linked to renewable energies¹. By the same token, the future introduction of environmental process standards into public procurement rules for utilities –discussion which are currently being held at the EU level- will allow public authorities in CEECs to introduce environmental conditions on utilities providers, for instance, demanding renewable energy what will promote the spread of renewable energies due to the demand side of the CEECS' administration. From this perspective, Joint Implementation should be seen as tool fostering the creation of other markets, in this case, the creation of markets for renewable energies.

5.4.6 Internal Market and Competition issues

Agreements between the EC and every candidate country provide for competition rules. The enlargement process focuses largely on a deep adoption of antitrust and state aid legislation as the necessary means to effectively enforce a competition regime similar to that of the EU. In implementing JI projects CEECs should guarantee the freedom of establishment as included in art. 43 as well as, the application of the whole competition *acquis*. Depending on the way JI will be implemented by CEECs state aid issues might emerge². The whole state aid regime and in particular the Commission Guidelines on Environmental State Aid should be considered³. It should be considered that the Environmental Guidelines distinguish investment and operating aid and lay down special provisions for renewable energies and combined heat and power generation which are particularly relevant with respect to JI projects. Although the Guidelines does not contain any particular clause on flexible mechanisms, the Commission will exempt eventual state initiatives related to JI projects which fall under the category of state aids. On the side of CEECS certain practices related with JI might require the application of the state aid regime. For instance, in the case of credit sharing between JI investing and host Parties. By the same token, certain developments of JI might oblige CEEC regulators to consider procurement rules.

increasing the share of renewable energies are salient Country Reports: Hungary, 109 IN Emissions Trading and Joint Implementation as a chance for the CEECs, German Federal Ministry for the Nature Conservation and Nuclear Safety, March 2001.

1 White Paper on Renewable Energies COM(97)599 final and Directive 2000/77 of 27 September 2001, OJ L 283/33.

2 See Isabella Atanasiu, State Aid in Central and Eastern Europe, Vol. 24 (2)World Competition, p.257-283.

3 Community Guidelines on State Aid for Environmental Protection, OJ C37, 03.02.2001.

6 Implications of extension of the Monitoring Mechanism for capacity building¹

National governments in CEECs that wish to engage in flexibility mechanisms, need to make climate change institutional infrastructure that provides transparency and accountability. However, the EU legislation does not directly prescribe the scale of the institution which should be responsible for a activities. Thus, in the context of JI the *acquis communautaire* will not have in general effects on the institutions involved, this depending on national institutional and policy traditions². Still, by requiring certain procedures the EU legislation might strengthen the institutional capacity of CEECs. The Monitoring Mechanism emerges precisely as a procedural regulation with capacity to improve the institutional capacities for laying the foundations of an efficient JI procedure.

The EU Monitoring Mechanism makes part of the EU policies and measures in the context of Climate Change. The Monitoring Mechanism include reporting and verification obligations regarding national inventories and policies. Given that many CEECs have no system for monitoring their GHG emissions or registering and tracking transfers of Assigned Amount Units (AAUs)/ERUs, this mechanism would impose clear obligations regarding reporting and inventories for CEECs countries³. Nevertheless, the Monitoring Mechanism does not contain specific references to inventories and reporting obligations related with Joint Implementation. The EU might amend the Monitoring Mechanism in order to include the monitoring and registries requirements derived from the JI mechanism –monitoring and transfers of ERUs- so as to facilitate EU JI initiatives on CEECs and contribute to increase transparency and accountability in CEECs countries adopting JI. This is specially valid bearing in mind that according to the Bonn Agreements, the eligibility of a Party to participate in the mechanisms is dependent on compliance with methodological and reporting requirements under the Protocol Art. 5,7, and 8 –as well as the acceptance of the Protocol’s compliance regime. The reporting requirements state that there has to be a national system for setting up of greenhouse gas

1 Council Decision 1999/296 amending 93/389.

2 Institutional clarity becomes also a plus within the EU investor countries. It has been observed institutional disparities regarding the adoption of national project mechanism policies. For instance, the CDM in Holland is under the competence of the Ministry of Environment whereas Joint Implementation has been absorbed by the Ministry of Economic Affairs.

3 On the monitoring deficiencies for environmental policies in CEECs see the recent report EU Commission, Administrative Capacity for Implementation and Enforcement of EU Environmental Policy in the 13 Candidate Countries, DG Environment, Brussels, 2001.

inventories in place. However, JI has a “second track“ which can be used even if the host country does not fulfil the reporting requirements. Use of the second track leads to increased transaction costs as an independent verifier has to check the emission reductions in a manner comparable with CDM procedures.

The OECD Annex I Expert Group and several think tanks have looked at the needs for capacity building in Eastern Europe¹. Cozijnsen concentrates on JI². They came to the conclusion that needs are high and existing capacity will not be sufficient to fulfil the reporting requirements. Thus the EU would need to invest in capacity building or risk that the accession countries can only use the second track. This would be ideally done through help in applying the Monitoring Mechanism.

Some recent institutional developments at the EU level might equally reinforce the monitoring capacities of CEECs regarding climate change policies. Negotiations for the participation in the European Environment Agency were opened in March 2000 with all 13 candidate countries. On the candidate side, Bulgaria, Cyprus, Malta, Latvia, Slovakia and Slovenia have completed their ratification process so that their respective agreements have entered into force, which ensure full participation of these 6 candidate countries in the European Environmental Agency as from first January 2002. Given the role of the Environmental Agency in information collection and elaboration of guidelines covering both the collection and evaluation of emission inventories and national programmes CEECs might benefit from the co-operation of the Agency³.

7 Integration of JI into Emissions Trading Schemes

There is no doubt that the interrelationships between JI within national and/or European Emissions Trading will be an area of future concern. For the time being, the UK and Denmark have expressed that the integration of JI and CDM projects is being planned

1 Fiona Mullins, Capacity Needs of Central and Eastern Europe: An Assessment of National Systems for Reporting Participation in the Mechanisms in Six CEE Countries, London, 2000.

2 Jos Cozijnsen, Capacity for Joint Implementation in the context of the European Climate Change Programme, Brussels, 2001.

3 According to the last proposal of Directive on Emissions Trading in Europe, the Commission will create a Central administrator for national registries and although it has not yet been decided the institution that will develop such a function, the Proposal suggest that it could be undertaken by the European Environmental Agency. If this is so, that would imply a considerable increase of EEA competencies in the domain of Climate Change. See Proposal for a Directive establishing a framework for greenhouse gas emissions trading within the European Community and amending Council Directive 96/61 EC, COM (2001) 581, 23.10.2001.

for their respective national systems. Likewise, the ET proposal elaborated by the EU Commission expresses the willingness of including JI within the European scheme, although the EU proposal on Emissions Trading does not provide any detail about the conditions for its integration¹.

Indeed, in case of lack of common standards, investors would be tempted to obtain more ERUs from those JI projects in CEECs which assume less stringent criteria on both baseline or monitoring than others. Clearly, that might perturb the ET system and create distortions of competition that would be detrimental to both, companies and governments. Still, this problem would emerge as well with JI within EU member states. Equally, the combination of different ET approaches adopting different parameters regarding baselines and eligibility could provoke distortions since the acceptance of credits from less stringent ET schemes for fulfilling trading targets may impair the environmental integrity of trading schemes. At the same time it could be possible that certain countries would restrict the assimilation of ERUs within their national ET, for instance on the base of the source or type of project.

That is why this problem will need to be solved in the future in the EU either by adopting either harmonisation or mutual recognition². Probably the most appropriate way would be to establish some kind of standardised for the implementation of JI in order to guarantee the environmental integrity of this instrument in the perspective of an enlarged European Union. Community rules/guidelines could be envisaged on eligibility criteria, monitoring requirements, baseline setting criteria and linkages with a EU ET and access to JI credits. Also we should bear in mind that given that the EU is a Party to the Protocol and in the eventuality that member states through the EU Council decide to allow the EU to fund JI projects, the EU might operate JI projects by imposing conditions to restrict access to the project mechanisms, for instance, the right to buy credits from particular types of projects, eligibility criteria (best promising projects from an environmental point of view) including specific terms of references through public procurement procedures; small scale projects, baseline setting criteria (explicit reference to BAT for the construction of the baseline).

1 Proposal for a Directive establishing a framework for greenhouse emissions trading within the EU and amending Council Directive 96/61 COM (2001)581.

2 For an overview of European integration techniques on the environmental area see Katharina Holzinger, *Optimal Regulatory Units: A concept of regional differentiation of Environmental Standards in the European Union*, Max Planck Institute, *Recht der Gemeinschaftsgüter*, 1999.

Some observers have argued that the more developed countries in transition would prefer a full integration in an EU trading scheme whereas those lagging behind prefer JI as the latter brings in direct investment and does not need much upfront investment in inventories and registries¹. Full integration in EU trading certainly is quite complex and has to be complemented by a clearing procedure to balance national accounts at least at the end of the first commitment period.

8. Recommendations for the EU

In order to speed up the introduction of JI projects, CEECS as well as the EU should undertake as a first task an impact assessment of the implementation of JI in Eastern Countries and the relationship of this mechanism with the *acquis communautaire*. First of all, the Commission should view climate change as a priority area within the environmental *acquis*. Because JI will alleviate the poor environmental standards in CEECs countries, the EU should help CEECs to establish a predictable legal framework on which to base the JI preventing in this way the current legal uncertainty regarding procedures of JI in CEECs countries². Moreover, the EU should adopt a holistic approach regarding the implementation of Climate Policies and Joint Implementation in particular within CEECS. If up to now, the EU Commission assessment of the transposition of the *acquis* has been directive-by-directive, it would be preferable to assess the whole climate policies of the accession country in question³. Nevertheless, the role of the EU in defining Joint Implementation is still to be clarified. A whole harmonization based on substantive requirements at the EU level might not be desirable and is impossible at this late stage of negotiations. Rather the EU should use procedural regulations as it has been its last practice on environmental regulation –EMAS, EIA, IPPC. Only in this way, Joint Implementation could act as an instrument aiding CEECS to get closer to the EU *acquis* requirements. The EU should aim at an early

1 Wytze van der Gaast, Project-based mechanisms: past experiences and the future, presentation at Hamburg Institute Workshop, URL: <http://www.hwva.de/climate>, accessed Oct. 1, 2001.

2 "National JI selection criteria can appropriately channel investment to reduce or complement the cost for achieving development, environmental or other sectoral objectives linked to their preparation for accession", Elena Petkova and Kevin A. Baumert, Making Joint Implementation Work: Lessons From Central and Eastern Europe, World Resources Institute Climate Notes, November 2000.

3 See Daniel Piazzolo, Eastern Europe between Transition and Accession: Analysis of Reform Requirements, Kiel Institute of World Economics, Working Paper, N. 991, July 2000, proposing different flexible formulas facilitating CEECs the fulfilment of the *acquis communautaire*. See equally Slawomir Tokarski and Alan Mayhew, Impact Assessment and European Integration Policy, Sussex European Institute, Working Paper No. 38 December 2000 proposing impact assessment as a technique to determine which are the economic, financial, political, legal and social impacts of adopting EU policy and regulation by CEECs.

implementation of the monitoring guideline and couple it with technical assistance. This would allow to build strong inventory systems in the accession countries and thus avoid the risk that JI is restricted to the second track.

Finally, the actual implementation of the laws and regulations in the “acquis” can be enhanced by the incentive given through successful JI.

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