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ADDENDUM TO THE PROPOSAL

from:	Commission
dated:	30 July 2003
Subject:	Commission Staff Working Paper Extended Impact Assessment on the Directive of the European Parliament and of the Council amending Directive establishing a scheme for greenhouse gas emission allowance trading within the Community, in respect of the Kyoto Protocol's project based mechanisms

Delegations will find attached a proposal from the Commissionother institution, submitted in a letter of Mrs Patricia BUGNOT, Director to Mr Javier SOLANA, Secretary-General/High Representative.

Encl.: SEC(2003) 785

COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 23.7.2003
SEC(2003) 785

COMMISSION STAFF WORKING PAPER

EXTENDED IMPACT ASSESSMENT

on the

DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

amending Directive establishing a scheme for greenhouse gas emission allowance trading within the Community, in respect of the Kyoto Protocol's project based mechanisms

{COM(2003)403 final}

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PART 1 - *ANALYSING THE ISSUE/PROBLEM – THE POLICY CONTEXT*

1. *What issue/problem is the policy/proposal expected to tackle*?

By linking the Kyoto project-based mechanisms to the Community emissions trading scheme, the proposal provides an additional incentive for projects aimed at reducing greenhouse gases emissions, contributing to the fight against climate change as well as promoting of global sustainable development.

1.1. The problem and its causes

Rising concentrations of greenhouse gases in the earth's atmosphere, resulting from economic and demographic growth since the industrial revolution, are leading to potentially irreversible climate change. Human-induced emissions of greenhouse gases (carbon dioxide, methane, nitrous oxide and long-lived fluorinated gases such as SF6, HFCs, and PFCs) are changing how the atmosphere absorbs energy. The result is known as the enhanced greenhouse effect. Scientific evidence of the Intergovernmental Panel on Climate Change (IPCC) confirms that climate change is already taking place and that most of the warming observed during the last 50 years is attributable to human activities. There is a world-wide consensus of scientists on the problem of climate change and its causes.

Scientists further project that the rate of change will be more rapid than previously expected. Projections for climate change, based on current scientific evidence, include the rise in global average surface temperatures by 1.4 to 5.8 degrees Celsius over the next 100 years. This projected rate of warming is the highest in 10,000 years. The rise in temperature is predicted to have strong adverse effects including rising sea levels (between 9 and 88 centimetres), more irregular precipitation patterns, and an increase in extreme weather events like droughts and storms[1].

1.2. The inherent risks of the initial situation

- *Ecosystems and natural resources*

  A shift in temperature zones caused by climate change could seriously affect biodiversity and lead to a geographic shift in the occurrence of different species and/or the extinction of species in many locations as the world's ecosystems will not be able to adapt as fast as the climate is changing[2]. Changes in precipitation and more irregular precipitation will mean that water resources in many regions will come under further stress. This will affect both drinking water supplies and irrigation. Floods are further expected to increase water degradation. Moreover, higher maximum temperatures are expected over nearly all land areas. Warm seasons will become dryer in most mid-latitude continental interiors, increasing the frequency of droughts and land degradation. This will be particularly serious for areas where land degradation, desertification and droughts are already severe. Sea level rise may also lead to the salinisation and loss of low-lying agricultural land.

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1 Third Assessment Report of the IPCC (2001).

2 CGIAR Annual Report 2000.

- *Economic sectors and food security*

  Climate change is expected to have a clear negative impact on agricultural and livestock activities. Climate change will worsen food security and exacerbate hunger.

- *Human health, migration/displacement and infrastructure:*

  Changes in temperatures and precipitation are also likely to increase the geographic range of vector-borne diseases such as malaria and dengue fever and expose new populations to these diseases. Furthermore, droughts and flooding may increase water-associated diseases such as cholera and dysentery, particularly in areas with inadequate sanitary infrastructures. The loss of landmass in coastal areas is likely to lead to increased permanent or temporary displacement of populations. Harbours, offshore infrastructure, coastal urban areas and tourist infrastructures are particularly at risk, while extreme weather events may also damage inland road, rail, and air infrastructure, thereby disrupting vital transportation systems.

- *Macro-economic impacts of climate change*

  Apart from having direct economic effects on already vulnerable livelihoods in terms of lost endowments and entitlements, the impacts of climate change are also likely to have major macro-economic implications, in both the short and the long-term perspective. Moreover, chronic food insecurity and deteriorating health conditions will put more pressure on national budgets and costs related to potential conflicts due to increasing water scarcity or mass migration may also be expected. Existing poverty and lagging development will amplify the adverse effects of both gradual changes in climatic conditions and extreme weather events, leading to economic losses, including costs for relief and reconstruction efforts, that may consume a significant proportion of affected countries' GDP.

1.3. Who is affected?

The vulnerability of human populations and natural systems to climate change differs substantially across regions and populations within regions. But all regions are likely to experience some adverse effects of climate change. However, the linkage that exists between poverty and the environment implies that adverse effects on ecosystems, natural resources and related economic sectors will affect poor people hardest. As far as Europe is concerned, Southern Europe and the European Arctic are more vulnerable than the rest of Europe. In particular, summer runoff, water availability and soil moisture are likely to decrease in Southern Europe. Increases are likely in winter rainfall in the North and South. In coastal areas, the risk of flooding, erosion, and wetland loss will increase substantially with implications for human settlement, industry, tourism, agriculture and natural habitats.

⇒ ***Key message:*** Climate change is recognised to be one of the greatest environmental and economic challenges facing humanity as it may result in major unsustainable trends all around the world in the medium and long term. The risks inherent in the initial situation are very high as confirmed by current and projected impacts of climate change.

2. *The Policy context*

2.1. The international context

The 1992 **United Nations Framework Convention on Climate Change** (UNFCCC) provides the foundation for mulitlateral efforts to address this problem. Its ultimate objective is the "stabilisation of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner"[3]. Under the UNFCCC, countries should adopt climate change mitigation programmes and adaptation strategies, promote technology transfer, co-operate on scientific and technical research, and promote public awareness, education and training. Industrialised countries agreed to take measures aiming at stabilising their greenhouse gas emissions at 1990 levels by the year 2000.

In 1997, the countries belonging to the UNFCCC ("Parties") adopted the **Kyoto Protocol** with a view to strengthening the UNFCCC commitments, having recognised these as being insufficient to address climate change. All Parties took on general commitments while industrialised countries ("Annex I Parties") accepted legally binding emissions reduction targets, given their greater historical and current share of greenhouse gas emissions. These countries agreed to reduce their collective emissions of six greenhouse gases by 5,2 % below 1990 levels during the period 2008-2012 (the first commitment period under the Kyoto Protocol). The EU is committed to reducing its emissions by 8 % by 2008-2012, while most Acceding Countries are committed to reductions of between 6 and 8%. To meet their targets, Annex I Parties must put in place domestic policies and measures that cut their greenhouse gas emissions and may also offset their emissions by increasing the uptake of carbon dioxide in by carbon sinks.

Supplementary to domestic action to reduce greenhouse gas emissions, Annex I Parties may use the three so-called **"Kyoto flexible mechanisms"**, Joint Implementation (JI), the Clean Development Mechanism (CDM) and international emissions trading to contribute to compliance with part of their emission reduction target. These are designed to help Annex I Parties cut the cost of meeting their emissions targets by using opportunities to reduce emissions that cost less in other countries than at home. Modalities for the implementation of them were agreed upon at the UNFCCC's Seventh Conference of the Parties (COP7) in November 2001 ("the Marrakech Accords").

To date, 111 countries have ratified the Kyoto Protocol representing more than two-thirds of the world's population. These countries represent 44,2% of industrialised countries' emissions in 1990, and the Kyoto Protocol will enter into force once ratified by the Parties responsible for 55% of these emissions. Since the decision of US government not to ratify it, the Kyoto Protocol will enter into force and enable the creation of JI and CDM credits once Russia decides on ratification, as is expected to happen in the course of 2003.

[3] Article 2 of the UNFCCC.

2.2. The Community context

Tackling climate change is identified as a key priority in the Sixth Environment Action Programme of the European Community (2001-2010)[4] emphasising it as an outstanding challenge for the next 10 years and beyond.

At the European Council in Gothenburg in June 2001, Heads of State and Government stressed that combating climate change is a major priority of the European Union's Sustainable Development Strategy and reaffirmed their strong commitment to meeting the EU target under the Kyoto Protocol irrespective of its entry into force.

The EC and the Member States are all Parties to the UNFCCC and have ratified the Kyoto Protocol[5].

2.2.1. *Community policies and measures on climate change and the ECCP programme*

The European Climate Change Programme (ECCP) was established in June 2000 to help identify the most environmental and cost-effective additional measures enabling the EU to meet its target under the Kyoto Protocol[6]. The Commission Communication on the implementation of the first phase of the ECCP[7] identifies this proposal as part of a package of 12 priority measures to be brought forward in 2002 and 2003.

2.2.2. *The Community emission allowance trading scheme*

In October 2001, the Commission made a proposal for a Directive establishing an emission allowance trading scheme within the Community[8], covering carbon dioxide emissions from large stationary sources including power and heat generators, oil refineries, ferrous metals, cement, lime, glass and ceramic materials, and pulp and paper[9].

National authorities will issue site-specific greenhouse gas emission permits to installations setting requirements for monitoring and reporting emissions of greenhouse gases. Member States will allocate EU emission allowances to installations, based on a national allocation plan developed in accordance with common criteria. Holdings of allowances will be recorded in a registry in each Member State, and four months after the end of each year, operators will be required to hand over allowances equivalent to the installation's emissions during the preceding year to the national authority.

Operators of installations will be free, if they so wish, to buy or sell their allowances. If an operator can reduce emissions, the excess allowances can be traded for a profit. The operator of an installation that increases its emissions beyond its allocation can acquire additional allowances in respect of those emissions from the market, thereby ensuring that

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4 Decision No 1600/2002/EC of the European Parliament and of the Council of 22 July 2002 laying down the Sixth Community Environment Action Programme, OJ L 242 of 10/9/2002.

5 The EU ratified the Kyoto Protocol pursuant to Council Decision of 25 April 2002 concerning the approval on behalf of the European Community of the Kyoto Protocol to the UNFCCC and the joint fulfilment thereunder, (OJ 15 May 2002, L130, page 1). The EC and its Member States ratified the Kyoto Protocol on 31 May 2002.

6 For more information, see the European Climate Change Programme Report, June 2001 http://europa.eu.int/comm/environment/climat/eccp_longreport_0106.pdf

7 COM (2001) 580 final, October 2001.

8 COM (2001) 581 final.

9 It is estimated that these sources will emit 46% of the Community's carbon dioxide emissions in 2010.

the overall reduction target will be met. If an operator does not hold sufficient allowances, harmonised non-compliance penalties will apply. In this way, emissions reductions can occur where it is most economically efficient for them to take place right across the EU.

The Council adopted a Common Position[10] on this Directive on 18 March 2003, for the EU-wide emissions trading to start in 2005. It is envisaged that the EC emissions trading scheme will apply to the EEA and Acceding countries, and can be linked with other domestic emission trading schemes in third countries that have ratified the Kyoto Protocol. The Common Position states that linking JI and CDM to the Community scheme "*is desirable and important to achieve the goals of both the reduction of global greenhouse gas emissions and to increase the cost-effective functioning of the Community scheme. Therefore, the emission credits from the project-based mechanisms will be recognised for their use in this scheme subject to modalities adopted by the European Parliament and the Council on a proposal from the Commission, which should apply in parallel with the Community greenhouse gas emissions trading scheme in 2005*"[11].

At the time the Common Position was adopted, the Commission reaffirmed "*its intention to propose, by the first half of 2003, a Directive for linking project-based mechanisms including JI and the CDM with the Community greenhouse emission trading scheme".*

⇒ ***Key message:*** The fight against climate change is a major policy priority. The EU has affirmed international leadership on climate change. The EC and its Member States are committed to meeting their Kyoto targets. The Commission has identified and proposed a number of important policies and measures to fight against climate change and implement the Kyoto Protocol. The Community emission allowance trading scheme is a major step forward in this direction. This proposal is to allow operators in the Community scheme to bring credits from JI and CDM into the Community scheme in order to fulfil their obligations thereunder.

3. *The Kyoto Protocol's project-based mechanisms*

Joint Implementation and the Clean Development Mechanism are designed to provide flexibility to countries to meet part of their Kyoto targets by taking advantage of opportunities to reduce greenhouse gas emissions in other countries at lower cost than at home. The rationale is that, for the global environment, where the emission reduction occurs is of secondary importance provided that real emission reductions are achieved.

JI and the CDM are "project-based", and allow the generation of credits when projects achieve emission reductions that are additional to what would have occurred in the absence of the project (the "baseline" scenario). Such projects need to result in real, measurable and long term benefits related to the mitigation of climate change, while contributing to the achievement of sustainable development goals of host countries, notably through the transfer of environmentally sound technologies.

Parties are responsible for meeting their Kyoto commitments but it is mainly the private sector that is expected to drive JI and the CDM. JI and CDM will not come into existence until the Kyoto Protocol enters into force, and the private sector has been hesitant so far about JI and the CDM because of uncertainties related to its entry into force. Other factors include the potential transaction costs and risks associated with early implementation of JI

[10] Council document 15792/02

[11] Article 30 (3) "Review and further development"

and the CDM, and the lack of capacity and institutions in many potential host countries on JI/CDM implementation. In addition, aside from a market for purchases by governments, as long as companies are not subject to an obligation to reduce their own greenhouse gas emissions at domestic level, it is likely that the engagement of the private sector in JI and the CDM will remain limited.

JI and the CDM are different to the extent that projects take place in countries with different commitments and, consequently, they are subject to different project cycle requirements under the Marrakech Accords, which can be presented as follows:

3.1. Joint Implementation under Article 6 of the Kyoto Protocol

JI projects are to be undertaken in developed or countries with economies in transition (Annex I Parties to the UNFCCC), involving at least two countries who have agreed to an emission target, i.e. their emissions are "capped". Russia and the Ukraine have a large potential for abatement at costs lower than in the EU and are therefore likely to benefit substantially from JI projects.

For example, a company decides to invest in a project replacing a coal-fired power plant with a more efficient combined heat and power plant in Russia. It could also be a project for methane capture from a landfill site located in Poland. It may also consist in building a new renewable energy plant to produce electricity in Bulgaria. However, as is the case for CDM projects, Annex I Parties are to refrain from using credits generated through nuclear energy to meet their emissions targets under Article 3(1) of the Kyoto Protocol. Article 3(1) contains a legally-binding commitment for Annex I Parties to ensure that their emissions do not exceed their emission limitation and reductions commitments inscribed in Annex B to the Kyoto Protocol. It also contains a collective goal for all Annex I Parties to have a view to reducing their overall emissions by at least 5 per cent below 1990 levels in the period 2008-12. This collective goal originally formed part of a separate article but was added to Article 3(1) in the later stages in the negotiations. The Kyoto Protocol clearly foresees legally-binding commitments for Annex I Parties under Article 3(1) extending beyond 2012. This is clear from Article 3(9) of the Kyoto Protocol, which provides for Annex B to be amended to establish commitments for subsequent commitment periods that take effect through Article 3.1. It follows therefore that the commitment on Annex I Parties to refrain from using CERs and ERUs generated from nuclear facilities has been fixed until 2012 and provides an indication for the continuation for subsequent periods.

Joint implementation projects must have the approval of all Parties involved, and must lead to emission reductions that are additional to any that would have occurred without the project. Because JI projects have to achieve additional emission reductions, they are expected to promote transfers of advanced technologies to third countries and thus contribute to their sustainable development goals. The emission reductions are calculated and verified against a counter-factual "baseline" scenario to be developed and justified by the project participants before the project is implemented. The baseline reflects a scenario showing what would have happened in terms of emissions in the absence of the JI project.

Emission reductions resulting from JI projects take the form of emission credits that are called *emission reduction units* ("ERUs") and issued by the host country, i.e. the country in which the project is implemented.

- There are two possible procedures for carrying out a JI project.The first procedure ("track one**"**) allows a host Party to apply its own procedures to projects where that Party meets certain eligibility requirements laid down in the Marrakesh Accords.

  The second procedure ("track two") applies where the host Party does not meet these eligibility requirements. In such cases, the amount of ERUs generated by a project must be verified under a procedure supervised by the 10-member **Article 6 Supervisory Committee**, which is to be set up after the Kyoto Protocol's entry into force. Project participants must prepare a project design document for evaluation by an independent organisation accredited by the Supervisory Committee. The evaluation, which includes an opportunity for public comment, is to make sure that the project has an appropriate project-specific, transparent and conservative **baseline** (the starting point for measuring emission reductions or removals), and a **monitoring plan** to ensure that emissions and removals can be accurately estimated. The baseline and monitoring plan must be devised according to standard criteria, and the project design document should also include an assessment of the project's environmental impacts.

  Based on its evaluation and reports by project participants, the independent entity will determine the ERUs that may be issued by the host Party.

The implementation of a JI project results in a transfer of ERUs from one country to the other, but the total emissions permitted in the countries remains the same (a "zero sum operation"). The host country benefits from minimising the part of its assigned amount to transfer, while the investor country benefits from maximising the assigned amount units it acquires. It is expected that both countries will strike a fair balance, so the Marrakech Accords require a less strict control procedure than for the CDM (see below 3.2).

JI projects can also be implemented between two Member States of the European Community. In such a case the environmental effect as regards greenhouse gas emissions is also a zero-sum game within the Community. The interaction between the Community emission trading scheme and such potential projects is of increasing importance.

3.2. The Clean Development Mechanism under Article 12 of the Kyoto Protocol

CDM projects are to be hosted by developing countries (non-Annex I Parties to the UNFCCC) who do not have quantitative emission reduction targets. For a developed country whose emissions are capped, using emission reductions coming from an uncapped country allows an increase of emissions. The Kyoto Protocol allows developed countries to use emission reductions from CDM projects to offset an increase in their domestic emissions provided that CDM emission reductions are additional, real and measurable. Additional levels of assurance are required regarding the validity and amount of emission credits resulting from CDM activities, reflected in the project cycle requirements for the CDM in the Marrakech Accords.

CDM implementation is supervised by a UNFCCC body, the Executive Board, responsible for issuing the CDM emission credits called certified emission reductions ("CERs"). As an example of a CDM project, a company in Portugal may invest in a rural electrification project using solar panels in South Africa. It could also be the refurbishment of a coal fired plant switching to clean coal technology in China. Projects may be done on the supply side or the demand side to affect either the production of emissions or their consumption.

As for JI projects, the Marrakech Accords requires Annex I Parties to refrain from using CERs generated through nuclear energy. Afforestation and reforestation activities are eligible under the CDM for the first Kyoto commitment period (2008-2012). Definitions and modalities for their implementation are still being negotiated among UNFCCC Parties and may be adopted in December 2003 at the earliest.

Projects must lead to real, measurable and long-term benefits related to the mitigation of climate change additional to any that would have occurred without the CDM project. Consequently, the CDM is expected to be an excellent vehicle for the transfer of advanced environmentally sound technologies to developing countries, while assisting them in achieving their sustainable development objectives, such as poverty alleviation and sectoral economic reform. Public funding can finance CDM projects but must not result in the diversion of official development assistance (ODA).

The Protocol envisages a prompt start to the CDM, allowing CERs to accrue from projects from the year 2000 onwards for use in the period 2008-12. The CDM Executive Board was elected at COP 7, and its key initial tasks were to develop simplified procedures to encourage small-scale projects, notably for renewable energy and energy efficiency activities, and to accredit independent organisations. Accreditation is a prerequisite condition for CDM projects to be registered by the Executive Board. The CDM project cycle is illustrated below:

- CDM projects must be based on a project-specific, transparent and conservative **baseline** and must have in place a rigorous **monitoring plan** both devised according to an approved methodology. New methodologies must be authorised and registered by the Executive Board. Project participants must prepare **a project design document**, including a description of the baseline and monitoring plan to be used, an analysis of environmental impacts, comments received from local stakeholders and a description of the additional environmental benefits that the project will generate.

- CDM projects must be approved by the **designated national authorities** of the Annex I and the non-Annex I Party involved. The host country has to confirm that the project assists it in achieving sustainable development.

- An operational entity will then review the project design document and, after providing an opportunity for public comment, decide whether or not to **validate** it. If a project is duly validated, the operational entity will forward it to the Executive Board for formal **registration**. Unless a project participant or at least three Executive Board members request a review of the project, its registration will be deemed final after eight weeks.

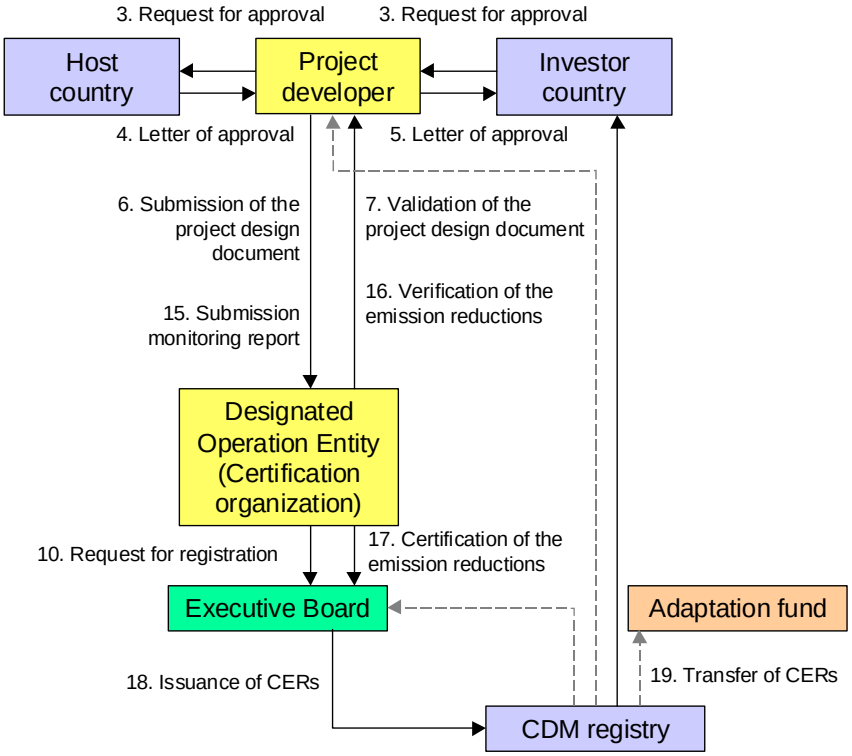
- Once a project is up and running, participants will **monitor** the project's emissions. Project participants will prepare a monitoring report including an estimate of CERs generated by the project and will submit it for **verification** by an operational entity. (To avoid conflict of interest, this will usually be a different operational entity to that which validated the project design document). Following a detailed review of the project, which may include an on-site inspection, the operational entity will produce a verification report and, if all is well, it will then **certify** the CERs as legitimate.

- Unless a project participant or three Executive Board members request a review within 15 days, the Executive Board will **issue** the CERs and distribute them to project

participants as requested. The CERs will be issued in the holding account of project participants in the CDM registry.

These steps – project preparation and approval, validation, registration, monitoring, verification and certification, and issue – make up the CDM project cycle. A share of proceeds, 2% of the CERs generated by projects will be used to finance an **Adaptation Fund** under the Kyoto Protocol to help particularly vulnerable developing countries adapt to the adverse effects of climate change (projects in least developed countries are exempt from this part of the levy in order to promote the equitable distribution of projects). Another share will cover the CDM's administrative costs.

The whole CDM project cycle is presented in the graph below in chronological order:



Concrete illustration of a possible CDM project:

A local developer, foreign company, or institutional investor identifies an investment that would reduce greenhouse gas emissions in a developing country. For example, they may own an electricity generator there that runs on diesel oil that can be made to run more efficiently using less energy and with fewer greenhouse gas emissions or even be replaced by renewable energy.

The project participants will approach the government of the country where the investment is located and ask for approval. The government will decide whether the project meets its sustainable development needs and whether to approve it as a CDM project. The government of a foreign investor should approve the project as well. The project participants must establish the baseline against which the greenhouse gas reductions will be measured and have it independently validated by a designated operational entity, and register the project with the CDM Executive Board.

The project participants must then continue to monitor the actual emissions that occur, and have them independently verified by another designated operational entity. If ongoing emissions are below the baseline, the CDM Executive Board issues (CERs) to the project proponent. These can be used by a foreign investor to meet climate change obligations in developed countries or sold by the project participants on the international market.

3.3. Ownership and use of JI and CDM credits

The owner of the emission credits can be the private company that developed the project, the investor country if there was a contractual arrangement with the project developer, but it could also be a third party funding body like a carbon purchase fund. In fact, ownership of the JI or CDM credits may be subject to negotiations between the project investors and the hosts. The project developer may retain all of them or there may be a transfer of ownership of part or all of the emission reduction credits to a third party. At the project development stage, arrangements can be made so that future credits may be transferred to a third party in return for capital to fund the project's development, or they may need to be shared out between a number of investors. However, the Marrakech Accords make clear that the Kyoto Protocol has not created or bestowed any right, title or entitlement to emissions of any kind.

According to the Kyoto Protocol, JI and CDM credits can be used by Parties to meet part of their Kyoto commitments. The Marrakech Accords stipulate that their use shall be supplemental to domestic action and that domestic action shall thus constitute a significant element of the effort made by each Annex I Party to meet its target.

The Marrakech Accords also provide for banking restrictions on JI and CDM credits: a country listed in Annex I can only carry over to the subsequent Kyoto commitment period those JI and CDM credits that were not used for compliance purposes up to a maximum 2.5% of a Party's assigned amount respectively into the 2013-2017 period[12] (i.e. 2.5% for JI credits and 2.5% for CDM credits).

Revenues from JI and CDM credits depend on many variable factors, including the total project costs and transaction costs associated with the implementation of the JI or CDM project cycle requirements. They can differ per type of project, location, project related negotiations, etc. In general it can be assumed that for projects in the power sector the proportion of carbon value compared to the total project costs is between 5 and 15%, depending on the lifetime over which the credits can be generated and depending on the carbon intensity of the power mix. For projects reducing methane emissions (landfill and waste recovery) this proportion will increase simply because the global warming potential of methane is 21 times higher than the global warming potential of CO_2.

⇒ ***Key message:*** JI and the CDM are project-based instruments provided by the Kyoto Protocol primarily to give flexibility to governments to meet their target under Kyoto at lower costs. JI and CDM projects need to result in long-term climate change benefits and contribute to sustainable development. JI and the CDM are mainly driven by the private sector. JI and the CDM provide an economic incentive by creating revenues in the form of emission credits with a commercial value. Under the Kyoto Protocol, JI and CDM credits can be used by Parties to meet part of their emission targets while companies can sell them on the international market for greenhouse gas emission reductions.

[12] Decisions 16/CP.7 and 17/CP.7).

PART 2 - *WHAT MAIN OBJECTIVE IS THE POLICY/PROPOSAL EXPECTED TO REACH?*

1. *What is the overall policy objective?*

The overall policy objectives are to promote activities reducing greenhouse gas emissions in a cost-effective manner through market based instruments provided for in the Kyoto Protocol while contributing to global sustainable development and to offer lower cost compliance options to those companies that are subject to an obligation to reduce greenhouse gas emissions under the Community emission allowance trading scheme.

The overall policy objectives come within the context of both the international and Community policy frameworks to combat climate change and reduce greenhouse gas emissions: the Kyoto Protocol and the Community emission allowance trading scheme.

In order to meet part of its Kyoto target, the EC can take advantage of opportunities to reduce greenhouse gas emissions in other countries at lower cost than at home, in particular through project-based activities eligible under JI and the CDM.

The Community emission allowance trading scheme creates such a domestic obligation for some activities by placing direct emissions of the greenhouse gases covered by the Kyoto Protocol within a regulatory framework where the total quantity of greenhouse gas emissions covered by this scheme is limited (see Part 1, section 2.2.2).

In concrete terms, this proposal allows for the recognition in the Community emission allowance trading scheme of emission reductions generated through JI and CDM projects under the Kyoto Protocol. In that respect, the proposal creates a bridge between the Kyoto Protocol framework and the Community scheme. Companies may either generate JI or CDM credits themselves by investing in projects or buy JI and CDM credits and use them to comply with their domestic obligation to cover actual emissions from their installations within the Community.

This proposal will stimulate the demand for JI credits, in particular from Russia because of the great potential for projects there, and will lead to more investments by EU companies and the development transfer of advanced environmentally sound technologies and know-how. It will also stimulate demand for CDM credits and thereby assist developing countries hosting CDM projects in achieving sustainable development goals through the transfer of environmentally sound technologies and know-how. It will contribute to combating climate change through implementing the Kyoto Protocol and the UNFCCC.

The proposal also creates synergies with European research through the Community's RTD Framework Programmes. European research supports technologies to address climate change the transfer of which to other industrialised and to developing countries will be promoted by JI and CDM.

⇒ ***Key message:*** The policy objective is to link the Kyoto project-based mechanisms to the Community emission allowance trading scheme. Concretely, linking the Kyoto project based mechanisms means that JI and CDM credits are recognised within the Community scheme for their use by companies to fulfil their domestic obligation to reduce emissions. Implicitly, "linking" means that JI and CDM credits are equivalent from an environmental and economic point of view to EU emission allowances. Economically, "linking" presents a number of advantages, in particular because it would reduce the overall Kyoto compliance costs.

2. *Distinction between different levels of objectives*

2.1 General objectives/Outcome indicators

- Contribute to global sustainable development by reducing global emissions of greenhouse gases;

- Increase cost-effective emission reduction potential world wide;

- Contribute to the smooth implementation of both the Kyoto Protocol and the UNFCCC, particularly with regard to the transfer of climate friendly technologies and enhancement of capacity on climate change mitigation and adaptation;

2.2. Specific objectives/Result indicators

- Increase the number and diversity of cost-effective compliance options both for Member States to meet their Kyoto target as well as for companies to fulfil their domestic obligation to reduce greenhouse gas emissions;

- Assist countries hosting JI and CDM projects in achieving their sustainable development goals;

- Improve liquidity of the emissions trading market within the Community;

2.3. Operational objectives/Result indicators

- Lead to larger cost savings for operators due to the lower marginal abatement costs in some third countries, particularly in countries with an economy in transition and developing countries;

- Stimulate the demand for JI/CDM credits and boost private sector's investments in JI and CDM projects;

- Reduce uncertainties and risks related to the implementation of the Kyoto Protocol's project-based mechanisms and therefore minimise associated transaction costs;

- Encourage environmental policy integration and promote the EU sustainable development strategy into external EC policies, and the related use of Community funding through Development Aid Co-operation assistance.

Main indicators:

- Number of JI/CDM projects,
- Quantity of GHG emission reductions achieved through JI and the CDM,
- Size of the EU emission trading market,
- Allowance price on the EU emission trading market,
- Level of transaction costs associated with JI/CDM implementation,
- Bilateral/regional JI/CDM partnerships, etc.

3. *Has account been taken of any previously established objectives? To what extent is the proposal consistent with the EU Sustainable Development Strategy*?

3.1. Integration of climate change into other policies

In the context of the so-called "Cardiff process", Heads of State highlighted several times (Cardiff, Vienna and Gothenburg summits) the area of climate change as the most obvious example of the need for integration of environmental concerns into other policy areas. This proposal contributes to further integrate climate change into other policies, in particular EC external policies.

3.2. Has account been taken of any previously established objectives?

In the light of its expected results, the proposal aimed at linking the Kyoto project-based mechanisms to the Community emission allowance trading scheme:

- ✓ Takes fully account of previously established objectives and commitments, in particular the implementation of the Kyoto Protocol and the reduction of greenhouse gas emissions in a cost-effective manner within the EU through Directive 2003/…/EC.

- ✓ Builds upon existing legislative framework at Community level for the reduction of greenhouse gases and other related Community environmental legislation (IPPC, EMAS, waste legislation, fluorinated gases…)

3.3 Consistency with the EU Sustainable Development Strategy

- ✓ Tackling climate change is identified as a key priority in the Sixth Environment Action Programme of the European Community (2001-2010).

- ✓ Climate change is addressed as a major challenge in both the internal EU dimension[13] as well as in the external dimension[14] of the EU Sustainable Development Strategy. In particular in its Communication "A Sustainable Europe for a Better World: A European Union Strategy for Sustainable Development", the Commission proposes that the strategy should focus on a small number of problems which pose severe or irreversible threats to the future well-being of European society among which climate change is on the top of the list. Beyond the strong commitment to meet the EU target under Kyoto, the Commission proposes a number of measures to be adopted at Community level. Many of these measures have been elaborated in the context of the ECCP, including the establishment of a Community emission allowance trading scheme by 2005 (see Part 1 section 2.2.2 of this EIA).

[13] "A sustainable Europe for a Better World: A European Union Strategy for Sustainable Development" COM(2001) 264 final.

[14] "Towards a global partnership for sustainable development" COM(2002) 82 final.

PART 3 - WHAT ARE THE MAIN POLICY OPTIONS AVAILABLE TO REACH THE OBJECTIVE?

1. What is the basic approach to reach the objective?

The basic approach is to take advantage of market based instruments in order to promote global reduction of greenhouse gas emissions in a cost-effective manner while contributing to the smooth implementation of the Kyoto Protocol which sets forth obligations for both the EC and its Member States.

This approach is fully consistent with the notion of engaging business in EU climate policy by offering market-based incentives and instruments. Giving the opportunity to companies to use the Kyoto project-based instruments to fulfil domestic obligation will create dynamic incentives towards development and application of low cost climate-friendly mitigation technologies while creating synergies with existing objectives (sustainable development, global reduction of greenhouse gases, poverty alleviation…).

The private sector is expected to be the main driver for investments under JI and the CDM and the approach proposed works towards this expectation.

As for the design of the Community emission allowance trading scheme, a harmonised approach would maximise the expected results while preserving the environmental integrity, simplicity and efficiency of Community action against climate change. Such a harmonised approach is deemed essential by the private sector.

1.1 Situation with a "No policy change option"

Member States can participate in JI and CDM projects and authorise their legal entities to do so in accordance with the Kyoto provisions and the Marrakech Accords without there being any provisions to link JI and the CDM to the EC emissions allowance trading scheme. In this case, JI and CDM credits would be used by the Member States themselves to meet part of their emission reduction target under the Kyoto Protocol, or under some domestic framework. The "No policy change option" would mean that emissions credits generated by JI and CDM projects would not be recognised within the Community emissions trading scheme, and operators within the Community scheme would continue to fulfil their obligations to match their actual emissions exclusively with allowances allocated ex-ante by Member States. Some expected benefits from linking JI and the CDM to emissions trading (see Part 2) would not materialise.

Under the "No policy change option", the Community emissions trading scheme would stay the same. Member States cannot introduce a direct link with Kyoto credits at national level, but an indirect link would nevertheless exist between the Kyoto Protocol's project based mechanisms and the Community emission allowance trading scheme. Member States could acquire JI/CDM credits on the international emission trading market and, to the extent that this is compatible with state aid rules and the criteria of Annex III of the emission allowance trading Directive, issue additional allowances ex-ante to their entities (not during a trading period).

In such a scenario, companies would have an incentive to engage in JI/CDM investments where a government is ready to pay for emission credits through national carbon purchase funds or where other domestic obligations are imposed. The Netherlands has been concluding contracts to acquire JI and CDM credits through the ERUPT/CERUPT

programme for several years now, while a number of Member States (France, Germany, the UK, Finland, Austria, Denmark) are currently considering the desirability and practicalities of setting up national or regional[15] carbon purchase funds.

The idea is to use public funding or to develop public/private partnerships to pro-actively create markets for JI/CDM credits and promote private sector engagement in JI and the CDM by acquiring credits to help meet the national Kyoto target. The World Bank also launched in 2000 the Prototype Carbon Fund (PCF) directed towards the acquisition of JI and CDM credits, with a strong emphasis on kick-starting the market, based on a learning by doing approach and supporting a range of policy objectives. Some Member States and European companies have contributed to the PCF and will receive credits in return for these investments.

But there is a consensus recognising that these financial mechanisms can only help kick-off JI/CDM implementation by mitigating non-commercial risks and minimising high transaction costs associated with early action through JI and the CDM. The stimulus will not be as high as it would be with this proposal, and the expected impacts in terms of reduction of compliance costs would be much lower.

1.2 Alternative Community policy options

The conditions under which JI and the CDM can be linked to the Community emission allowance trading scheme are central to the proposal. Apart from the "no policy change" option and the option chosen in the proposal, there are no real alternatives. However, there are complementary options that can facilitate JI/CDM implementation on a project-by-project basis, thus reducing risks and minimising transaction costs. These options are:

- Promoting of early participation of private sector in JI/CDM by increasing capacity and reducing take up risks as well as transaction costs through innovative financial mechanisms. Several options, which would provide an economic incentive for the private sector to invest in JI/CDM projects and which would be complementary with ongoing or planned actions by Member States, are currently being explored within the Commission.

- Facilitating JI/CDM implementation through Community programmes by providing support to "learning by doing" for JI and CDM activities in order to create an enabling environment including supportive policies and legal frameworks in countries who wish to host JI or CDM projects. Some Community programmes (for example TACIS and SYNERGY) provide some support of that kind. But more should be done in terms of strengthening the capacity of potential host countries, in particular developing countries, to enable them to take full advantage of the Kyoto Protocol's project based mechanisms. This would also greatly facilitate the private sector's engagement in JI and the CDM. Such activities can be undertaken within current EC and Member States budgetary practices, and could be combined with this proposal.

[15] As an example of regional carbon fund: the Testing Ground Facility for JI in the Baltic Sea Region for which an agreement is proposed between Baltic Sea States in the context of the inter-governmental Baltic Sea region Energy Co-operation (BASREC).

2. Which policy instruments have been considered?

2.1. What policy instrument?

The main objective of this proposal is to recognise JI/CDM credits within the Community emission allowance trading emission scheme regulated by Directive 2003/…/EC. This can only be achieved through an instrument in the form of a legislation amending this Directive. In that respect, voluntary agreements would not be appropriate as they cannot be used to amend a Directive.

Legislative instruments provided for in Article 249 of the Treaty are Decisions, Regulations and Directives. A **Decision** would not fit with conditions set forth in Article 249 because it is necessary to amend a Directive and create rights and obligations for a range of legal entities. A **Regulation** would not fit with conditions set forth in Article 249 either: a regulation of direct application is not appropriate for reaching the policy objective. Member States will have to make a number of policy choices while ensuring consistency with their national climate change strategies and JI/CDM national programmes.

A **Directive** is therefore the appropriate policy instrument in the light of both the objective and the content of the necessary proposal. A "self standing" Directive is not the best option in as far as it would mean repeating a number of provisions of Directive 2003/…/EC. For better regulation, and as the most coherent way to achieve the policy objective while not entailing additional implementation costs, the best method is to consolidate existing legislation by proposing a Directive to amend Directive 2003/…/EC. A proposal to amend a legal instrument in the form that it will be adopted is precedented, for example, in relation to Regulation 2037/2000 on the protection of the ozone layer.

✓ 2.2. Effectiveness of the policy instrument chosen

- **Efficiency: how well are resources used?**

- Does the option maximise results for a given level of resources? **Yes**
⇒ JI/CDM will be mainly driven by the private sector: business spending on cleaner technologies.
⇒ An amendment to existing legislation is a minimal policy intervention while maximising the expected results for both Member States and companies.
- Are the results achieved at least cost? **Yes**
⇒ JI and the CDM provide an economic incentive for low cost mitigation options to comply with international commitments under the Kyoto Protocol. The option facilitates companies' access to low cost compliance options to fulfil their domestic obligations under the Community emissions trading scheme.
⇒ The proposal is to be implemented as an amendment to the Directive establishing the Community emission allowance trading scheme and will not entail additional implementation costs to those foreseen for the implementation of this scheme.

- **Effectiveness: would the option achieve the objective?**

- Does the option achieve the policy's objectives? **Yes**
⇒ Stimulate the reduction of emissions of greenhouse gases world-wide
⇒ More opportunities for lower compliance costs

- Will the option be accepted/complied with by the affected parties? **Yes**

⇒ Engaging in JI/CDM projects or acquiring JI/CDM credits is an option, not an obligation, which provides more flexibility and low cost opportunities to companies as well as to Member States. For that reason, the option will be very much accepted and be welcomed. Compliance with the Kyoto rules and modalities for JI/CDM implementation will be scrutinised by Member States and by the institutions established under the Kyoto Protocol (Executive Board of the CDM, Article 6 Supervisory Committee for JI activities). Compliance with provisions under the proposal will be the responsibility of Member States who have the obligation to meet their Kyoto commitments while not contravening the objective of the Community emissions allowance trading scheme.

- **Consistency: what are the indirect impacts?**

- What are the likely positive and negative spillovers onto other economic, social, or environmental policy areas?

⇒ The proposal should positively contribute to the greening of Foreign Direct Investment and create synergies with other objectives such as poverty alleviation and the promotion of access to affordable clean energy as a follow up to the WSSD Plan of implementation (see also Part 4 of this EIA).

- Would the option minimise distributive trade-offs and/or lead to win-win situations? **Yes**

⇒ The option is likely to lead to a "win-win-win" situation: more flexibility and lower compliance costs for Member States and their companies, stimulation of action to reduce global greenhouse gas emissions, transfer of clean technologies supporting sustainable development objectives for the benefit of third countries hosting JI/CDM projects.

3. Individual elements/design parameters

The Commission considered a number of policy options. Many of these were analysed and debated in the multi-stakeholder ECCP Working group on JI/CDM (see Part 6 of the EIA).

The issues identified as possible options are presented in section 3.1 below including the reasons to address them or not in the proposal. The options that are necessary to achieve the policy objective and reflected in the proposal are presented in section 3.2 hereinafter.

3.1. Issues identified as possible options

- **Issue**: Should credits from all JI/CDM project activities be unconditionally recognised as convertible into allowances in the emissions trading scheme (except those generated from nuclear facilities, which cannot be used by Annex I Parties, in accordance with the Marrakech Accords)?

An unconditional recognition of all projects would encourage non sustainable projects and activities that achieve only temporary removals of emissions which would later be released into the atmosphere and which could result in significant socio-economic and environmental impacts (such as on local communities that are highly dependent on natural resources, biodiversity and natural ecosystems).

Furthermore, the role of carbon sinks in the context of the Kyoto commitments has been a controversial issue at the UN level for a number of reasons. Firstly, much scientific

uncertainty remains about the effects of emissions removals by carbon sinks. Secondly, with LULUCF activities (land use, land use change and forestry), carbon sequestration is inherently temporary and reversible, and it is not clear how this can be reconciled with entity-level emissions trading, as this would necessitate the later attribution of subsequent releases of greenhouse gases back to the beneficiary (operator) of the initial sequestration credit. This makes it inconsistent with the objectives of the Community emissions allowance trading scheme, which is designed as a technological driver to achieve permanent emission reductions. Thirdly, uncertainties are still high as to how emission removals by sinks can be accurately monitored and accounted for, even for projects under JI. Fourthly, afforestation and reforestation activities are currently eligible under the CDM only for the first Kyoto commitment period and subject to a tight cap and much uncertainty remains as to whether and how these activities will still be eligible after 2012. Modalities for the inclusion of afforestation and reforestation activities under the CDM will not be agreed at international level before COP9 (December 2003) at earliest. In the light of the application of these modalities, the Commission will give due consideration to whether and, if so, how credits from LULUCF activities could be used in entity-level emissions trading in the Community scheme.

Conclusion: It was decided that credits should not be recognised unconditionally from all project activities, in particular from activities which do not achieve long term climate benefits or which are not sustainable, and that credits from emission removals due to carbon sinks should not be recognised within the Community emissions allowance trading scheme.

- **Issue**: Should the quantity of credits to be recognised in the Community emission allowance trading scheme be limited?

Unlimited recognition of JI/CDM credits within the scheme may result in substantial increases in emissions within the EU in sectors covered by the scheme, if companies concentrate all their emission reduction efforts outside the EU. The use of JI and CDM credits should not provide a disincentive to engage in domestic abatement measures in the medium and long term. Whilst unlimited recognition of JI and CDM credits may make compliance for operators in the Community scheme even cheaper, it may also undermine the environmental integrity of the scheme.

These concerns are recognised in the Kyoto Protocol, which requires that *"The acquisition of ERUs shall be supplemental to domestic actions for the purposes of meeting commitments*[16]*"*, and that *"Parties … may use the certified emission reductions accruing from such project activities to contribute to compliance with part of their … reduction commitments*[17]*"*. While developing countries are looking for investments through the CDM, they also want industrialised countries to take significant action to reduce their emissions at home and will be unwilling to take on greater commitments unless this is the case. The Marrakesh Accords further define the need for the project mechanisms to be supplemental to domestic action, *"affirming that the use of the mechanisms shall be supplemental to domestic action and that domestic action shall thus constitute a significant element of the effort made by each Party included in Annex I to meet its quantified emission …commitments"*[18].

16 Article 6(1)(d) of the Kyoto Protocol, on JI

17 Article 12(3)(b) of the Kyoto Protocol, on the CDM

18 Decision 15/CP.7: "Principles, nature and scope of the mechanisms pursuant to Articles 6, 12 and 17 of the Kyoto Protocol"

While the Community and its Member States agree to use of the mechanisms being supplemental to domestic action, the Community scheme creates an EU-wide market where allowances can be traded without restriction. This means that Member States cannot take individual decisions on what credits to recognise or not to recognise in the context of the Community scheme. It is therefore necessary to closely monitor the level of JI and CDM credits converted for use in the Community scheme and have a provision in this proposal for a review to be undertaken to ensure if necessary the Marrakesh Accords are respected, as this cannot be done by the Member States individually in respect of the Community scheme. It remains the responsibility of Member States to ensure supplementarity in respect of use of JI or CDM credits by Member States or by private individuals in respect of commitments outside of the Community scheme.

In addition, there is also the concern that this "outsourcing" of emission reductions outside the EU would mean there would be fewer of the domestic environmental co-benefits that often result from further greenhouse gas emission reductions, such as reductions in sulphur or nitrogen dioxide emissions. Finally, limiting the recognition of JI/CDM credits in the form of conversion into allowances by no means limits the possibility for companies to generate and acquire JI/CDM credits beyond the limit. Non-convertible credits retain commercial value and there will be a demand for them as Kyoto compliance instruments.

Conclusion: As a result of these considerations, it was decided that the quantity of JI and CDM credits to be recognised in the Community emissions allowance trading scheme should be closely monitored and, if necessary, limited to ensure that participating sectors also continue to carry out greenhouse gas mitigation activities within the EU and that Member States and the Community are in a position to respect their international commitments.

- **Issue**: Should the recognition of CDM credits be permitted before 2008?

The Kyoto Protocol states that CERs obtained before 2008 may be used to assist in achieving compliance in the first commitment period (2008-2012)[19]. Therefore, providing in EC law for CDM credits to be used pre-2008 would not be in line with the Kyoto Protocol's approach, the certainty of the acceptance after 2008 of CDM credits generated before then to meet obligations under the EC scheme will nonetheless give an additional stimulus for the CDM at an early stage and can therefore be expected to reduce transaction costs and lower risks associated with investing in CDM projects.

The CDM Executive Board, in charge of supervising CDM activities, will register the first CDM projects in 2003, which will then start up. It can be anticipated that these projects may generate credits to be issued by the CDM Executive Board within the next 2-3 years. To be exchanged for allowances, CDM credits have first to be transferred from the CDM registry to a Member State's national registry subject to the verification of the transaction by the International Transaction Log to be established by the UNFCCC Secretariat[20]. This can happen only if companies are authorised to transfer and/or to acquire CDM credits and only if the authorising Party is eligible to do so at that time[21]. The exchange of CERs for allowances would only be possible once the authorising Party is eligible to participate in

19 Article 12(10)

20 Section D in Decision 19/CP.7 Modalities for accounting assigned amounts under Article 7.4 of the Kyoto Protocol, Marrakech Accords.

21 Para 33 of the Annex to draft Decision -/CMP.1 on modalities and procedures for a CDM as defined in Article 12 of the Kyoto Protocol, as applied in accordance with para 2 of Decision 17/CP.7 (FCCC/CP/2001/13/Add.2)

the Kyoto mechanisms and the International Transaction Log has been established. To be eligible to participate in the mechanisms for the transfer of Kyoto credits, a Party to the Kyoto Protocol has to have established a national system for the estimation of greenhouse gas emissions, established its assigned amount, a national registry in place and submitted its most recent inventories as well as supplementary information on its assigned amount, in particular to account for removals by sinks[22]. Whether a Party fulfils all eligibility criteria will be subject to a review by UNFCCC experts in accordance with Article 8 of the Kyoto Protocol. As the EC is also a Party to the Kyoto Protocol, the EU's initial assigned amount will also have to be established and reviewed as part of this exercise. The demonstration of eligibility to participate in the mechanisms is unlikely to happen in any case before 2007 subject to reviews being carried out in a timely manner.

If it were accepted that CERs were to be used within the Community emission allowance trading scheme in the first trading period (2005-2007), covered installations' emissions and the emissions of the country where the installations' are located would be higher than planned, and larger reduction efforts would be necessary post-2008 in order to reach compliance with the country's Kyoto target during the 2008-2012 period.

Conclusion: It was decided that, in line with the Kyoto approach that CERs are to be used by Parties in order to meet part of their Kyoto target in 2008-2012, CDM credits should not be recognised in the Community emissions trading scheme before 2008.

Other options ruled out by the Commission services at an early stage were:

- whether JI credits be recognised as from 2005, because this would technically be impossible, as JI credits will not be issued before 2008 and could therefore not exist in national registries and be converted into allowances. The Marrakech Accords clearly stipulate that JI projects can only generate emission credits to be issued after 2008;

- whether to provide for "domestic offset projects" to be recognised in the Community scheme, because it may impede the future extension of the scope of the Community emissions allowance trading scheme, would require the establishment of resource-intensive and expensive institutional capacity similar to that at UN level in order to generate and issue "domestic credits", because such projects would create more scope for double counting of any emission reductions and as recognising domestic offset projects could prejudice future decisions to undertake other policies and measures in sectors not in the Community scheme.

- whether companies should surrender JI and CDM credits directly for compliance with obligations in the Community emissions allowance trading scheme, because companies would then be subject to Kyoto restrictions on the carry-over and use and so these credits would thus never be fully fungible with allowances, resulting in a segmented market and creating different market prices. It would also make it more difficult to implement any qualitative and quantitative conditions over the use of specific credits, in particular for the implementation of Kyoto requirements, such as the commitment period reserve and supplementarity. Nor would it provide full certainty for operators and other market participants on which credits would be accepted or not, at the end of a trading period, for compliance with their emissions trading obligations; and

[22] Para 2 of the Annex to draft Decision -/CMP.1 on modalities, rules and guidelines for emissions trading under Article 17 of the Kyoto Protocol.

- whether to specify in more detail the agreed Kyoto project-cycle requirements to be applied by Member States in their approval processes, as this would involve the adoption of harmonised regulations on baseline and monitoring methods at Community level, which would take considerable time to do, and it could also make the JI/CDM project cycle more complicated to implement, and increase transaction costs.

4. *Competence, Legal Basis, Proportionality and Subsidiarity*

4.1. Competence

The EC and its Member States are Parties to the UNFCCC and have ratified the Kyoto Protocol[23]. Implementation of the provisions of the Protocol falls partly within Community competence and partly within the competence of Member States[24]. Under the Protocol, the EC as well as its Member States have quantified emission limitation or reduction commitments. The EC and its Member States are jointly fulfilling their commitments in accordance with Article 4 of the Protocol, and deposited their instruments of ratification simultaneously on 31 May 2002.

4.2. Legal basis of the proposal

Both the Council Decision 2002/358/EC ratifying the Kyoto Protocol and Directive 2003/…/EC establishing a Community emission allowance trading scheme are based on Article 175(1) of the Treaty. This proposal concerns the protection of the environment. Furthermore, as it amends the Directive 2003/…/EC, the proposal should be based on the same Treaty provision, Article 175(1).

4.3. Subsidiarity and proportionality

This proposal takes account of the **principle of subsidiarity**. Member States may continue to use JI and CDM outside the scope of the Community emission allowance trading scheme. Subject to the respect of international and Community law commitments, Member States retain discretion to adopt national strategies on JI/CDM, guidelines and procedures for their implementation, and conditions for the participation of their national entities. The proposal links JI/CDM credits to the Community scheme, meaning that these credits are recognised in a context regulated at Community level which can only happen through Community legislation.

The proposal takes account of the **principle of proportionality**. The proposal is limited to elements directly related to the recognition of JI and CDM credits to allow their use within the Community emission allowance trading scheme. It introduces these elements taking account of the objective and the architecture of the Community scheme. Provisions related to the conversion of JI/CDM credits into EU emission allowances are necessary to ensure that a single unit of account, the allowance, is used within the Community scheme. This conversion process also contributes to implementing some key Kyoto provisions (commitment period reserve, banking restrictions, supplementarity…) in a coherent and supportive manner with the implementation of the Community scheme. Subject to the

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[23] Council Decision 2002/358/EC of 25 April 2002 concerning the approval on behalf of the European Community of the Kyoto Protocol to the UNFCCC and the joint fulfilment thereunder, (OJ 15 May 2002, L130, page 1.

[24] As stated in Annex III to Council Decision 2002/358/EC of 5 April 2002 concerning the approval, on behalf of the European Community, of the Kyoto Protocol to the UNFCCC and the joint fulfillment of commitments thereunder.

respect of international and Community law commitments, the proposal does not affect the conditions of issue and transfer of credits under the Kyoto Protocol and the Marrakech Accords, nor does it supplement them with regard to project cycle requirements, modalities and procedures for JI/CDM implementation.

PART 4 - *WHAT ARE THE IMPACTS – POSITIVE AND NEGATIVE – EXPECTED FROM THE DIFFERENT OPTIONS IDENTIFIED*?

1. *What are the economic, social and environmental impacts*?

This proposal has mainly economic and environmental impacts, while social impacts are considered to be rather limited.

1.1 Economic impacts

The proposal will clearly result in a lower market price for emission allowances, resulting in lower compliance costs for businesses in the Community emission allowance trading scheme as compared to the "no policy change scenario". This is clear because the use of JI and CDM credits is an option, and so will only be used if this offers economic benefits. However, the precise magnitude of these economic impacts is difficult to quantify with certainty.

The policy option not to recognise all credits unconditionally implies positive economic impacts compared to the "no policy change scenario", while it may mean that some further economic benefits foregone.

This is equally the case for the policy options to limit the quantity of credits and to link to CDM only as of 2008.

1.2 Social impacts

It is difficult to provide a thorough assessment of social impacts that could result from linking JI or CDM projects to the Community emission allowance trading scheme. Such a link should stimulate the private sector's engagement in JI and CDM projects but participation in JI or the CDM is voluntary so it is difficult to predict where projects would take place, what technologies would be developed and in which context, who would be involved, and the implementation of JI and the CDM is just starting. Some possible social impacts can be foreseen from JI/CDM implementation which will be stimulated by this proposal. As most JI and CDM projects will be undertaken outside the Community, the anticipated social impacts within and outside the Community are:

- Within the Community:

Any negative social impacts of allowing operators to use JI and CDM credits in order to comply with their obligations under the Community emissions trading scheme will be minimal. Social impacts are mainly determined by the Kyoto targets that the Community and its Member States have taken on. It is essential to recall that emissions trading will reduce the costs, and thereby the economic and social impact, of fulfilling the EU commitments under the Kyoto Protocol. This proposal will allow these costs to be reduced even further.

This proposal will boost new employment opportunities for producers of modern technologies and foreign direct investments and promote research in new technologies emitting less greenhouse gas emissions. It will also create new employment opportunities in the engineering and service sectors for activities in support of designing JI/CDM projects and for the verification and certification of JI/CDM credits. These impacts arise from the proposal's stimulation of investments in JI and CDM projects in third countries.

This proposal offers European companies another possibility to reduce the costs of Kyoto compliance and reduces the overall competitiveness impact on European industry.

- Outside the Community:

By stimulating foreign direct investments, this proposal also creates new employment opportunities in countries hosting JI and CDM projects. In as far as JI and the CDM are expected to be a vehicle for the transfer of new technologies and know how, it should contribute to the improvement of professional skills of local employees. JI and CDM projects have to assist host countries in achieving their sustainable development goals in accordance with the Marrakech Accords. Before their approval, social impacts will have to be taken into account by both investor and host countries. Ancillary social benefits are expected in particular with the CDM, in terms of delivering real development benefits while creating synergy with the objective of poverty alleviation: for example, a renewable energy CDM project developing a programme for decentralised electricity (off-grid systems) could include a package of solar water pumping systems for domestic use and agricultural irrigation in remote areas. In that respect, the CDM should contribute towards the achievement of the commitment taken at the World Summit on Sustainable Development in Johannesburg by providing access to affordable energy to households.

1.3. Environmental impacts

The proposal should result in the same global environmental outcome, as the use of JI and CDM credits by installations under the Community emissions trading scheme implies greenhouse gas reductions are "outsourced" from the Community to third countries. This environmental neutrality is contingent on JI and CDM projects delivering actual reductions in greenhouse gas emissions of the same magnitude. When it comes to other environmental effects, in particular other air pollutants, the proposal has a negative impact, as the "outsourcing" of greenhouse gas emission reductions brings with it a loss of improved air quality benefits (in terms of sulphur dioxide and nitrogen oxides emissions). This loss in the EU is balanced by a gain of such co-benefits in JI and CDM host countries and is difficult to assess in detail as such benefits are very sensitive to local circumstances.

The individual policy options will have positive environmental impacts.

In particular not linking to CDM before 2008 and not recognising all credits unconditionally will have positive environmental impacts both in the Community and outside.

The following impact matrix summarises the economic, environmental and social impacts of key individual elements as well as the preferred policy package by comparing them to the "no policy change scenario":

Issue	Environmental impacts	Economic impacts	Social impacts
Linking without qualitative restrictions	Negative: Would not only imply "outsourcing" of emission reductions from the Community but encourage also non sustainable projects and activities that achieve only temporary removals of emissions which would later be released into the atmosphere and which could result in significant socio-economic and environmental impacts (such as on local communities that are highly dependent on natural resources, biodiversity and natural ecosystems)	Positive: - Reduction in compliance cost for EU ETS - Lower allowance price - More market liquidity - Some export opportunities for European technology vendors Difficult to quantify due to lack of analyzing abatement costs of sinks enhancement and uncertainty about the rules on sinks credits at UN level	Negligible, likely to be negative
Linking without quantitative restrictions	Negative in the Community: - may result in substantial "outsourcing" of emissions reductions implying foregone co-benefits in the EU; - could undermine the environmental integrity of the scheme	Positive: Would allow to maximize the economic benefits, but may retard technological development, resulting in foregone economic benefits in the medium-term	Negligible, likely to be positive
Linking to CDM as of 2005	Negative: Emissions trajectory in 2005 to 2007 would be higher so that more reductions have to be done in the EU in 2008 to 2012 Not quantifiable in detail with applied analytical tool	Positive: - Reduction in compliance cost for EU ETS - Lower allowance price - More market liquidity - Some export opportunities for technology vendors Not quantifiable due to lack of information on (or analytical basis to assume) how many allowances will be allocated by MS in 2005 to 2007	Negligible, likely to be positive
Linking policy package	Negative in the Community: "outsourcing" of up to 100 millions tonnes of CO_2 annually in emissions reductions, reduction in domestic action and loss of co-benefits Largely neutral from a global perspective	Positive: - Reduction in compliance cost for EU ETS by 20 % - Lower allowance price estimated to be reduced by 50 % - More market liquidity - Export opportunities for technology vendors	Negligible, likely to be positive

2. *How large are the economic and environmental impacts?*

Some of those economic and environmental impacts deemed most important have been subject to a quantitative assessment with the POLES model[25]. It needs to be mentioned that, despite much work by the European and international research community in recent years, modelling the impacts of the JI and the CDM is still a challenging exercise and is difficult to quantify with certainty. Furthermore, the methodology available allows only for a quantitative analysis of the policy option on limiting the amount of credits to be recognised. It further allowed to look at several economic impacts, while only one environmental indicator could be analysed. The other two main policy options – unconditional recognition of all credits and link to CDM as of 2005 - have been assessed in a qualitative manner in Part 3, section 3.1.

Analysis of the economic and environmental effects of linking to the Community emissions allowance trading scheme has been undertaken using the POLES model. This model has been developed through the Community Research Framework Programme was used by the Commission for analysis underlying its proposal to establish the Community scheme. It is a partial equilibrium model with global coverage that the Commission and others use to conduct analysis on climate and energy policy. Important assumptions of this analysis include (i) transaction costs to generate project credits, (ii) how much of the potential emission reductions will in fact be accessible with project-based mechanisms and (iii) the amount of allowances initially allocated within the Community scheme, and (iv) "correct" project baselines. Transaction costs are the extra costs involved in projects, including identifying promising projects, finding project partners, negotiating contracts and developing project baselines. The analysis uses accessibility factors, which take into account other factors influencing the volume of project credits including the institutional capacity of host countries and project-type specific circumstances.

This analysis is based on transaction costs of 20% of the abatement costs, that is to say, if a tonne of reduction costs €20 through a JI project, the transaction costs are assumed to be €4. A recent multi-year project sponsored by DG Research, Greenhouse Gas Emissions Control Strategies (GECS) has concluded that transaction costs could, in particular for small projects, run as high as €500 per tonne of CO_2. In order to estimate the volume and prices of JI and CDM credit supply accessibility factors have been used. Higher accessibility has been assumed for JI than for CDM, and for sectors with large stationary emissions sources compared to other sectors. The analysis has been based on the assumption of an "optimal" allocation in each Member State between sectors covered by the Community emissions allowance trading scheme and those not in the scheme, in the sense that the marginal abatement costs per tonne are equalised.

In the "no policy change" scenario, the annual compliance costs for participants in the Community emissions allowance trading scheme in the enlarged European Union[26] are estimated to amount to €2,9 billion in the first Kyoto commitment period (2008-12). The allowance price is estimated at €26 per tonne of carbon dioxide. Annual greenhouse gas

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[25] For details of the model see http://www.upmf-grenoble.fr/iepe/Recherche/Recha5.html. Impacts of Linking JI and CDM Credits to the European Emission Allowance Trading Scheme, KPI Technical Report, CNRS-IEPE, 2003.

[26] As the enlargement of the European Union will take effect in May 2004 and the Community emissions allowance trading scheme will commence in 2005 the analysis has been based on the enlarged EU. Due to model limitations Malta and Cyprus could not be included in the analysis with the POLES model.

emissions[27] in the enlarged Community would amount to 4.664 million tonnes of CO_2 equivalent.[28]

Allowing the use of JI and CDM credits of up to 6% of the total quantity of allowances allocated for the trading period 2008-12 is estimated to reduce the annual compliance costs for participants in the Community emissions allowance trading scheme to €2,4 billion, and result in an allowance price of about €14. Annual emissions in the enlarged Community would increase by 208 million tonnes of CO_2 equivalent. Of this increase, 91 million tonnes would come from JI and CDM credits used by operators in the Community emissions allowance trading scheme, while the remainder would come from the use of JI and CDM credits by Member States for Kyoto compliance.

Sensitivity analysis:

Sensitivity analyses have been undertaken by assessing four additional cases. Two cases investigate the effects of different levels for the use of JI and CDM credits and the others concern the degree of competition in demand for JI and CDM credits.

In the first case the use of JI and CDM credits is unlimited. This is estimated to result in annual compliance costs for participants in the Community emissions allowance trading scheme of €2,2 billion and an allowance price of under €13. Annual emissions in the enlarged Community would be some 224 million tonnes of CO_2 equivalent higher, of which 111 million tonnes of CO_2 equivalent would come from JI and CDM credits used by participants in the Community scheme. The JI and CDM credits used in the Community scheme would amount to an estimated 7 % of initially allocated allowances for the 2008-12 period.

In the second case the use of JI and CDM credits is allowed up to 3% of initially allocated allowances. This is estimated to result in annual compliance costs for participants in the Community emissions allowance trading scheme of €2,8 billion and an allowance price of €20. Annual emissions in the enlarged Community would increase by 171 million tonnes of CO_2 equivalent, of which 45 million tonnes would come from JI and CDM credits used by participants in the Community scheme.

In the third case only operators in the Community emissions allowance trading scheme would use JI and CDM credits, but *not Member States* themselves or *other Parties* to the Kyoto Protocol and their companies. In this situation, annual compliance costs for participants in the Community scheme are estimated at €1,1 billion with an allowance price of €5. Annual emissions in the enlarged Community would increase compared to the "no policy change" scenario by 192 million tonnes of CO_2 equivalent. The JI and CDM credits used in the Community scheme would constitute some 13% of initially allocated allowances for the 2008-12 period.

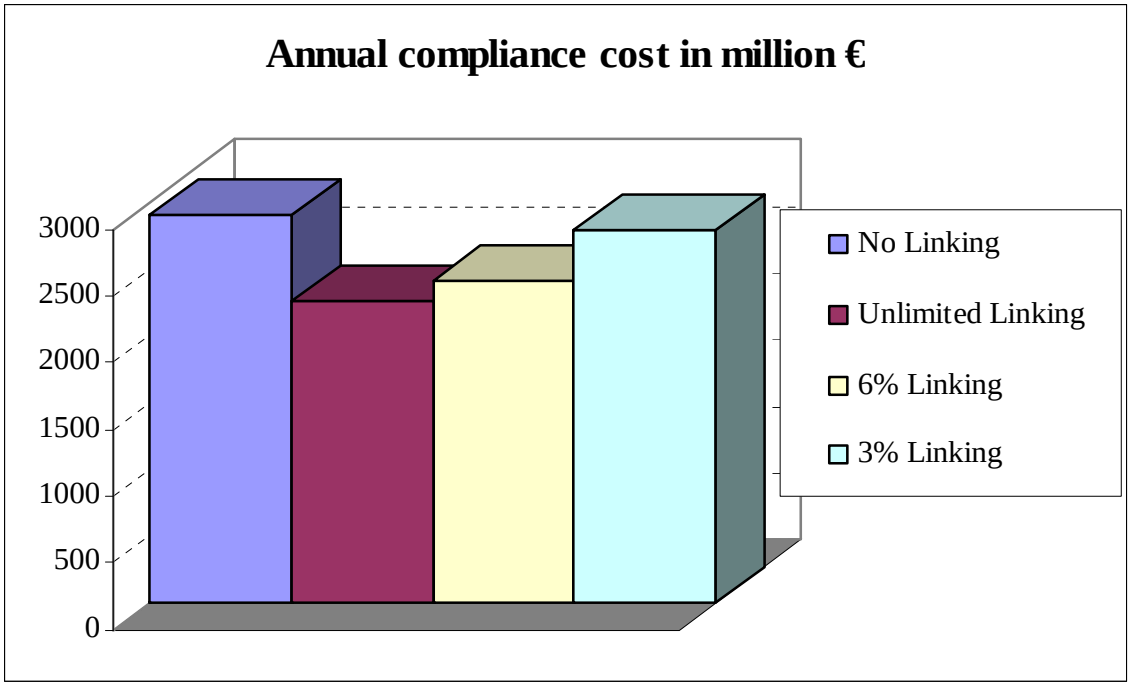
In the fourth case only operators in the Community scheme, other Parties to the Kyoto Protocol and their companies would act as buyers of JI and CDM credits, but *not the Member States*. In this scenario, annual compliance costs for participants in the Community scheme are estimated at €2,0 billion, with an allowance price of €11. Annual emissions in the enlarged Community would increase compared to the "no policy change" scenario by 128 million tonnes of CO_2 equivalent. The JI and CDM credits used in the

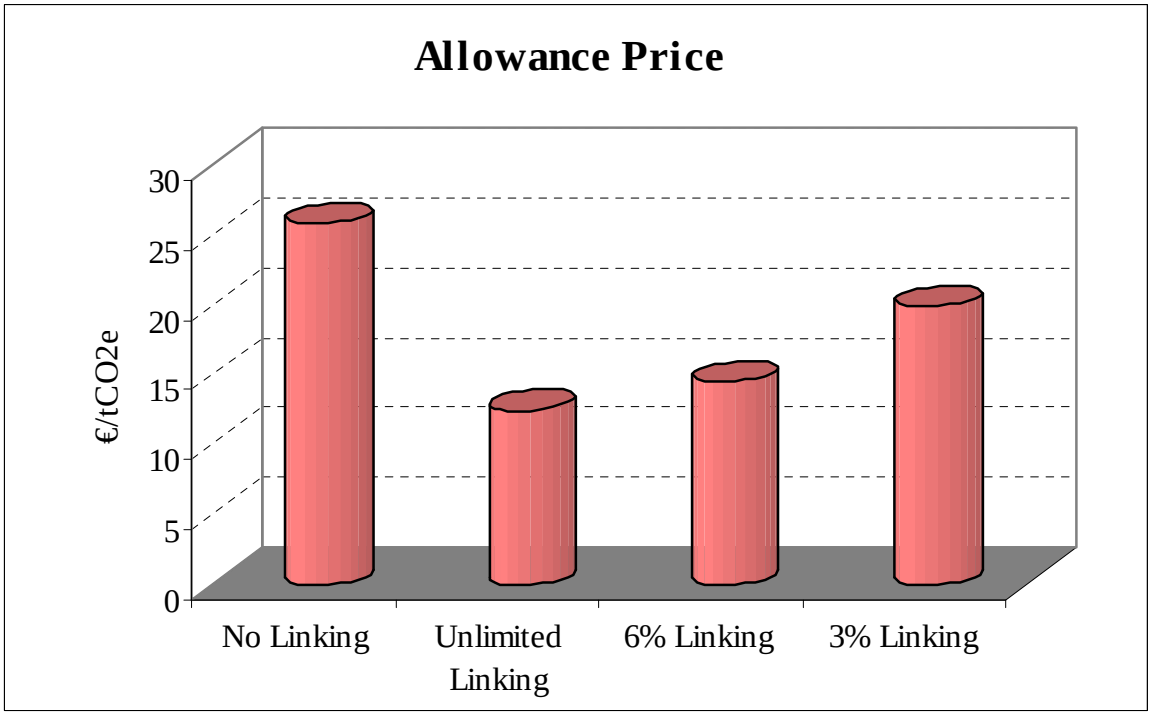
[27] Not taken into account the land use, land use change and forestry sector.

[28] This "no policy change scenario" represents not a perfect approximation of the status qou, as e.g. the activities of some MS and companies as regards JI and CDM could not be included.

Community scheme would constitute some 8% of initially allocated allowances for the 2008-12 period.

The two figures below illustrate the economic impacts of the “no policy change” case, the proposed policy and two sensitivity cases graphically.





All figures presented are estimates for the period 2008 to 2012.

A number of further sensitivity analyses could be undertaken in order to test the significance of assumptions of an economic nature like economic growth, abatement costs, allocation of allowances to covered installations, prices and transaction costs for JI and

CDM credits. If for example a higher amount of allowances would be allocated by Member States to covered installations there would be a reduced interest to convert project credits into allowances and the cost savings compared to the "no policy change scenario" would be smaller as well as the reduction in allowance prices lower than estimated. If JI and CDM credits would be cheaper than expected, or transaction costs lower than assumed, there would be more interest to convert project credits into allowances. In such a case the cost savings compared to the "no policy change scenario" would remain positive, but the limit to convert credits would imply that the foregone further cost savings are higher than estimated. Instead of testing individual sensitivities it would of course be more relevant and practical to look at packages of assumptions. As the uncertainties run in both directions, however, no further sensitivities have been analysed with the POLES model.

In summary the proposal is economically beneficial, as it is expected to reduce compliance costs for companies in the Community emissions allowance trading scheme by €0,5 billion or more than 20% and lower allowance prices by almost 50% compared to the "no policy change" case. On the environmental side the proposal is expected to result in an "outsourcing" of annual emission reductions from covered installations to third countries of close to 100 million tonnes of CO_2 equivalent.

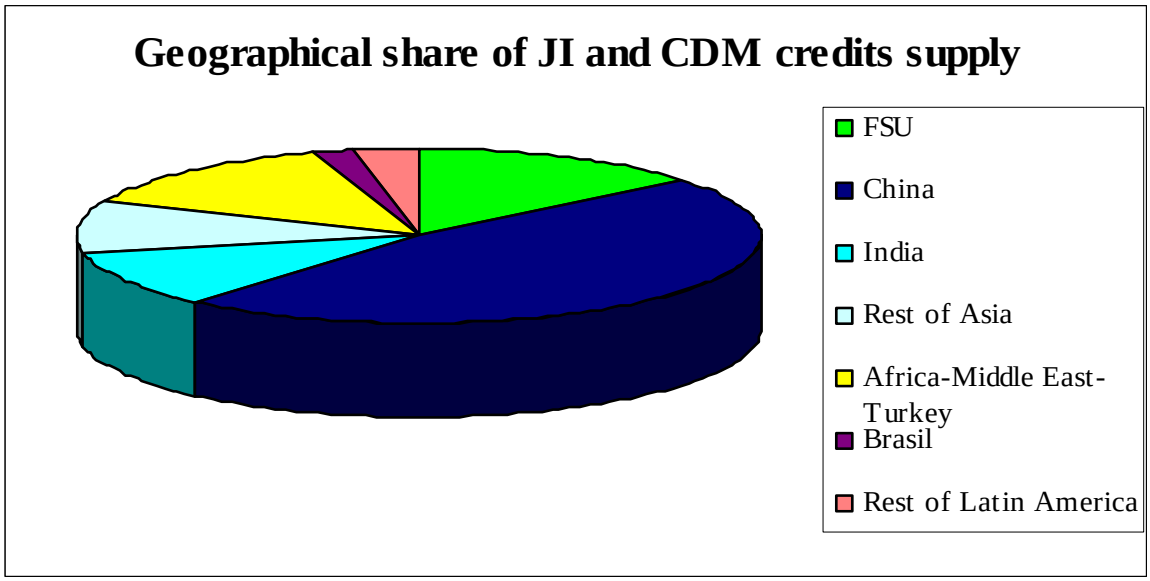
3. ***Are there any especially severe impacts on particular groups, sectors or regions?***

No.

4. ***Are there any impacts outside the enlarged Union*****?**

The proposal will boost environmental friendly investments, sustainable development and transfer of clean technologies to third countries. As mentioned under 4.2 it is expected that annual greenhouse gas emissions will be lowered by close to 100 million tonnes of CO_2 equivalent in third countries. This will also imply co-benefits for those countries in the form of cleaner air and decreased negative health impacts.

The bulk of JI project activities are expected to be in Russia and Ukraine. CDM project activities are expected to be in all world regions, while the major share is expected to be realised in Asia. The figure below illustrates the shares of world regions in JI and CDM credit supply and highlights important individual host countries (China, Russia, India and Brazil). The uneven geographical spread, with the dominance of Russia and Asia, indicates the need for public policy efforts to boost project activities in less attractive regions like Africa.



5. ***What are the impacts over time?***

It is expected that the proposal will improve over time the institutional capacities in developing countries to host projects and enable these countries to take an active part in multilateral efforts to combat climate change. This is of importance as combating climate change is a long-term challenge and in order to solve the climate problem effectively all countries will need to contribute over time. The transfer of clean technologies promoted by this proposal, has a key role to play to enable developing countries in the medium-term to contribute to this multilateral effort. The proposal will also increase the economic relations and co-operation between the European Union and other world regions.

6. ***What are the results of any scenario, risk or sensitivity analysis undertaken?***

See chapter 4.2.

⇒ ***Key message:*** The proposal is expected to reduce compliance costs for companies in the Community emissions allowance trading scheme by €0,5 billion or more than 20% and lower allowance prices by almost 50% compared to the "no policy change" case. On the environmental side the proposal is expected to result in an "outsourcing" of annual emission reductions from covered installations in the EU to third countries of close to 100 million tonnes of CO_2 equivalent.

PART 5 - *HOW TO MONITOR AND EVALUATE THE RESULTS AND IMPACTS OF THE PROPOSAL AFTER IMPLEMENTATION?*

This proposal is an amendment to the emission allowance trading Directive 2003/…/EC. Consequently, its implementation is linked to the implementation of that Directive with regard to monitoring and evaluation measures.

1. How will the policy be implemented?

Monitoring of emissions, verification of emission reductions and issue of JI/CDM credits resulting from JI and CDM projects are not regulated by this proposal. The implementation of JI and CDM projects will be supervised by the competent UNFCCC bodies and Parties as provided for in the Kyoto Protocol and Marrakech Accords.

This proposal allows the recognition of emission credits issued and transferred in accordance with the Marrakech Accords from certain JI and CDM project activities. The new element introduced in Directive 2003/…/EC in terms of implementation is that Member States may convert JI/CDM credits into EU allowances upon request of operators. The competent authority responsible for the exchange process should be the same as the competent authority in charge of the allocation of allowances under Directive 2003/…/EC. The conversion process constitutes a point of control, to be used by Member States' authorities to check whether the recognition of JI/CDM credits is to be allowed and whether the following conditions are met:

- Credits are generated from project activities that are not excluded from the proposal,

- Credits can be converted when the operator makes a request for it,

- JI credits are not issued for emission reductions from installations covered by Directive 2003/…/EC,

- Credits can be converted into allowances up to the maximum quantity that can be converted for each period of trading,

The competent authorities may convert JI/CDM credits that comply into allowances in addition to allowances allocated to installations pursuant to national allocation plans in accordance with Directive 2003/…/EC.

Operators will be able to convert JI and CDM credits in any Member State that foresees such a conversion, and once JI/CDM credits are converted into allowances, operators can use them as any other allowance. They can use them to fulfil their obligation under Directive 2003/…/EC to surrender allowances equal to the total emissions from their installations. They can sell them on the European emissions trading market. Banking for operators as from the 2008-2012 period is guaranteed in accordance with Article 13(3), irrespective of the origin of the allowance.

2. How will the policy be monitored?

Allowances and JI/CDM credits will only exist in electronic form. The conversion of JI/CDM credits into EU allowances as well as holding, transfers, and cancellation of newly issued allowances will be tracked through national registries. The Regulation on

registries to be adopted by the Commission in accordance with Article 19(3) of Directive 2003/…/EC will have to include provisions concerning JI/CDM credits converted into EU allowances, in particular a record of JI/CDM credits' serial numbers and of serial numbers of the allowances issued in conversion for those JI/CDM credits. The validity of transactions relating to transfers of JI or CDM credits will be verified by the International Transaction Log to be established by the UNFCCC Secretariat (Section D in Decision 19/CP.7 - Modalities for accounting assigned amounts under Article 7.4 of the Kyoto Protocol, Marrakech Accords). The validity of transactions relating to transfers of allowances, including allowances converted from JI and CDM credits, will be verified through automated checks by an independent transaction log maintained by a Central Administrator designated by the Commission[29] or the International Transaction Log to be established by the UNFCCC Secretariat.

3. What are the arrangements for any ex-post evaluation of the policy?

The proposal requires Member States to report each year on arrangements for the conversion of JI/CDM credits into EU allowances, as part of the report to be submitted to the Commission in accordance with Directive 2003/…/EC.

In addition, the proposed Decision for a monitoring mechanism of Community greenhouse gas emissions and the implementation of the Kyoto Protocol[30] implements some reporting requirements relevant to JI/CDM implementation. In particular, it requires Member States to report by 15 January 2005 and every two years thereafter information on:

- institutional and financial arrangements and decision making procedures to co-ordinate and support activities related to the participation in the mechanisms under Articles 6, 12 and 17 of the Kyoto Protocol.

- the extent to which domestic action constitutes a significant element of the efforts undertaken at national level as well as the extent to which the use of JI, CDM and international emissions trading under Article 17 of the Kyoto Protocol is supplemental to domestic action.

In addition, Directive 2003/…/EC requires the Commission to report to the European Parliament and the Council by June 2006 , considering *inter alia* the use of credits from the project-based mechanisms[31], which provides an opportunity to evaluate the application of the proposal and to propose changes if appropriate.

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29 Article 20 of Directive 2003/…/EC.

30 COM (2003)51 final of 5 February 2003, to replace Council Decision 93/389/EEC.

31 Article 30(2) of Directive 2003/…/EC.

PART 6 - STAKEHOLDER CONSULTATION

1. *Which interested parties were consulted, when in the process, and for what purpose?*

Consultation on this proposal was carried out as part of the development of the European Climate Change Programme (ECCP). The ECCP was set up as a multi-stakeholder process of working groups to identify cost-effective initiatives at EU-level in all sectors in order to enable the EC to meet its Kyoto Protocol target[32].

The ECCP Working Group 1 on the Kyoto Flexible Mechanisms and its sub-working group on JI/CDM reported in the first phase of the ECCP (2001) on its discussions with stakeholders from the relevant sectors.

In the October 2001 Communication on "the implementation of the first phase of the European Climate Change Programme" [33], the Commission made clear its intention to table in the first half of 2003 a proposal for a Directive linking JI and the CDM to the proposed Community emissions trading scheme.

In this context, as part of the second phase of the ECCP (2002), the Commission also decided to create a specific Working Group on JI and the CDM in order to discuss further the framework for the implementation of JI and CDM projects and the necessary modalities for linking them to emissions trading. Experts from the following relevant sectors were invited to join the JI/CDM Working Group: industry/business associations, NGOs, auditing/consulting companies, major international and European financing institutions, and government representatives from Member States and accession countries.

Members expressed their views as individuals, using their own expertise, although clearly they also often represented the views of their employer/organisation. Details of the participants are listed at Annex 1.

The mandate of the sub-group was to assess and make recommendations on the practicality of linking project-based mechanisms, including JI and the CDM, with the EC emissions trading scheme as well as to identify concrete actions at Community level to facilitate the implementation of the project-based Kyoto mechanisms. The working group met five times before adopting its conclusions and the meetings included detailed discussions about how the linking proposal should be developed.

2. What were the results of the consultation?

While group members expressed different views, conclusions were agreed unanimously by all the participants (see Annex 2). These conclusions were used to develop this proposal.

3. How the minimum standards for consultation were met?

In developing this proposal, the minimum standards for consultation, as set out in the Commission Communication COM (2002)277 final, were met as follows:

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[32] COM (2000) 88 final

[33] COM(2001)580 - http://europa.eu.int/eur-lex/en/com/pdf/2001/com2001_0580en01.pdf

A. Clear content of the consultation: The mandate for the Working Group on JI and the CDM was agreed by the ECCP Steering Committee. The Terms of Reference clearly identified four separate issues to be discussed, each of which was covered in one of the first four meetings, while the conclusions were discussed at the fifth meeting.

B. Publication: The October 2001 ECCP Communication, in which the Commission announced its intention to bring forward a proposal for a Directive, was published on the internet. Discussion papers, meeting minutes and the working group conclusions were all also made available on the ECCP website at:

   http://europa.eu.int/comm/environment/climat/flexiblemechanisms_secondphase.htm

C. Time limits for participation: Working group participants were always given at least ten working days to comment on meeting documents, minutes and the draft conclusions and, if they were unable to meet this deadline, they still had the opportunity to provide comments later on.

D. Acknowledgement and feedback: Feedback on comments received was circulated to the other group members and discussed during meetings. Participants were able to suggest changes to the minutes before they were adopted.

E. Specific elements for focused consultations: By inviting participation in the working group from a broad range of sectors, the Commission ensured that those affected by the policy, those involved in its implementation and those with a direct interest were all represented.

⇒ ***Key message:*** A wide range of stakeholders representing various interests were intensively and regularly consulted on the desirability and practicalities of linking the Kyoto project based mechanisms to the Community emission allowance trading scheme. Although they is a consensus to recognise the economic benefits that could result from "linking" JI and the CDM, many expressed the need for safeguards to preserve the environmental integrity of the Community emission allowance trading scheme.

PART 7 – COMMISSION PROPOSAL AND JUSTIFICATION

1. *What is the final policy choice and why?*

The final proposal is presented in the attached proposal for a Directive. It is based on a balanced approach by introducing the necessary elements in Directive 2003/…/EC to make the recognition of JI/CDM credits operational while preserving the architecture, the simplicity and the environmental integrity of the Community emissions allowance trading scheme. It includes the following key elements:

- Recognition of JI and CDM credits as from 2008 in accordance with Kyoto rules
- Recognition through a process of conversion of JI and CDM credits into EU emission allowances
- Preservation of the environmental integrity of the Community emission allowance trading scheme through:
  - the exclusion of credits from certain activities
  - monitoring which can trigger a review to consider placing a limit on the total quantity of JI and CDM credits that can come into the scheme
  - the prevention of the risk of double counting and double crediting of emissions
- Synergy with existing environmental policy and legislation and the EU Strategy on Sustainable Development

- The recognition of JI and CDM credits through their conversion into allowances.

Central to the proposal lies the concept of conversion by Member States of ERUs and CERs into allowances, the unit of account within the Community emissions trading scheme. Upon request to their competent authority, operators can obtain allowances converted from CERs and ERUs either generated by themselves or bought on the market. Conversion takes place through the issue of allowances by the Member State in exchange for those CERs and ERUs held by the operator in its registry. The allowances are in addition to those issued under the Community scheme for each period of trading.

The operation of conversion of CERs and ERUs into allowances has a number of advantages for Member State authorities and for companies participating in the Community emission allowance trading scheme. This will create certainty for companies participating in the emissions trading regime: they will be able to use allowances converted from CERs or ERUs in exactly the same manner as any other allowances that they have been initially allocated or have acquired, in order to fulfil their obligations under the Community emission allowance trading scheme. The absence of any additional restrictions on use or banking by entities thus provides full fungibility of companies' holdings within the Community emission allowance trading system. This also provides more certainty about which credits are accepted for compliance and lower transaction costs through simplicity.

Directive 2003/…/EC makes clear (in recital 9) that, from 2008, transfers of allowances will involve corresponding adjustments of Assigned Amount Units under the Kyoto Protocol, and this will be provided for in the Regulation on Registries adopted pursuant to

Article 19 of that Directive. For Member States, exchange of CERs and ERUs for allowances linked to Assigned Amount Units will facilitate the implementation of the Kyoto Protocol's restrictions on the use and carry-over of JI and CDM credits (up to a maximum 2.5% of a Party's assigned amount respectively into the 2013-2017 period[34]).

- Quantitative condition for the recognition of JI and CDM credits:

Unlimited access to JI and CDM credits may undermine the environmental integrity of the Community emission allowance trading scheme. Linking with JI and the CDM will result in an increase in emissions in sectors covered by the scheme and will affect the emission trajectories of installations using these credits. By "outsourcing" emission reductions outside the EU, environmental co-benefits from further greenhouse gas emission reductions e.g. lowered sulphur or nitrogen dioxide emissions are lost. Furthermore, it discourages initiatives for the reduction of emissions within the EU. By putting a downward pressure on the market price, it may also have perverse effects by retarding technological development of promising emission reduction technologies within the EU. These are necessary for fighting against climate change over the medium to long-term.

As a trade-off between economic and environmental considerations, the proposal sets an upper limit to the total quantity of credits that can be introduced into the scheme during any one period, so as to preserve in a harmonised way Member States' control on the level of efforts to be made by installations covered by the Community scheme. This contributes towards implementation of the requirement in the Kyoto protocol and the Marrakech Accords that "*use of the mechanisms shall be supplemental to domestic action*".

A review shall take place automatically once the number of CERs and ERUs converted for use in the Community scheme reaches 6% of the total quantity of allowances allocated for the period 2008-12 by the Member States. In this case, the Commission may consider whether a maximum level of for example 8% of the total quantity of allowances should be introduced for the remainder of the period, to ensure supplementarity under the Kyoto Protocol in respect of the Community scheme and to preserve the overall objective of the Community scheme to achieve emission reductions within the EU. The introduction of such a quantitative condition would be done through the committee carrying out tasks in relation to Directive 2003/…/EC, because of the practical need for this decision to be taken during the relevant trading period.

The level of 6% of the total quantity of allowances allocated, which will trigger the review, is estimated to correspond to some 2% of the EU base year emissions. This would represent a quarter of the total reductions the EU has to achieve in order to meet its target under Kyoto. Monitoring will be provided for by the Registries Regulation at the point of time where CERs and ERUs are converted into EU allowances and appropriate public access will be provided to information on amounts converted in the Member States[35].

This proposal does not prevent a Member State from generating and buying CERs and ERUs to use them for Kyoto compliance. It does also not prevent EU private sector entities to generate, hold, or transfer CERs and ERUs beyond the quantitative limit. The quantitative limit applies only to how many credits can be converted into allowances during a particular period of trading. CERs and ERUs not converted into EU allowances

[34] Decisions 16/CP.7 and 17/CP.7).

[35] See in particular Article 20(3) of Directive 2003/…/EC

retain their commercial value as Kyoto compliance instruments for Member States and other Parties to the Kyoto Protocol.

- Exclusion of credits generated from certain activities from the possibility to convert them into allowances:

The proposal excludes certain JI and CDM credits from being converted into allowances from projects that do not achieve permanent emission reduction from sources (emitters) and could result in significant impacts, on bio-diversity

First, the proposal excludes credits generated from nuclear facilities outside the EU. It is agreed in the Marrakesh Accords (Decisions 16/CP.7 and 17/CP.7) that Annex I Parties are to refrain from using CERs and ERUs generated from nuclear facilities to meet their commitments under Article 3(1) of the Kyoto Protocol. Article 3(1) contains a legally-binding commitment for Annex I Parties to ensure that their emissions do not exceed their emission limitation and reductions commitments inscribed in Annex B to the Kyoto Protocol. It also contains a collective goal for all Annex I Parties to have a view to reducing their overall emissions by at least 5 per cent below 1990 levels in the period 2008-12. This collective goal originally formed part of a separate article but was added to Article 3(1) in the later stages in the negotiations. The Kyoto Protocol clearly foresees legally-binding commitments for Annex I Parties under Article 3(1) extending beyond 2012. This is clear from Article 3(9) of the Kyoto Protocol, which provides for Annex B to be amended to establish commitments for subsequent commitment periods that take effect through Article 3.1. It follows therefore that the commitment on Annex I Parties to refrain from using CERs and ERUs generated from nuclear facilities has been fixed until 2012 and provides an indication for the continuation for subsequent periods.

Second, the proposal excludes the recognition of JI and CDM credits that may be generated through land use, land use change and forestry (LULUCF) activities. LULUCF activities can only temporarily store the carbon, which will at some time be released into the atmosphere. They are not covered by the Community emission allowance trading scheme, which aims at achieving permanent reductions from emission sources. The Community emission allowance trading scheme is very much designed as a technological driver for long term emission abatement improvements from energy and industrial sources. Recognising credits from LULUCF activities would not be consistent with the approach taken by the Council and the European Parliament on emissions trading. Furthermore, there are still many uncertainties as to how to account for and monitor emission removals by sinks under the Kyoto Protocol, both under JI and the CDM, both at country -and project- levels. It is not clear how the temporary and reversible nature of LULUCF carbon sequestration can be reconciled with entity-level emissions trading, as this would have to involve the attribution of subsequent releases of greenhouse gases to the beneficiary from the initial sequestration. Negotiations are currently in progress for the design of modalities for the inclusion of afforestation and reforestation under the CDM, which will not be adopted before December 2003 at the earliest. In the light of the application of these modalities, the Commission will give due consideration to whether and, if so, how credits from LULUCF activities could be used in entity-level emissions trading in the Community scheme. In addition, the JI and CDM should bring technology transfer through, for example, the promotion of new, cleaner technologies and improvements in energy efficiency, while afforestation and reforestation activities do not bring technological transfer or development. Because sinks projects are expected to be cheaper than projects involving the transfer of technologies, allowing credits from such projects to be converted would be at the expense of promoting technological transfer to

other industrialised and developing countries which is key to the JI's and CDM's success and the long-term goal of stabilising global levels of greenhouse gas emissions.

Subject to the double counting provisions for JI projects in the Community, the proposal recognises the possibility to convert JI and CDM credits from hydro power plants. However, Member States and other industrialised countries should take account of environmental and social impacts of project activities in which they participate or which are undertaken by legal entities they authorise to participate, which should avoid projects entailing negative environmental and social impacts, in particular from large hydro-electric power production as identified by the World Commission on Dams[36]. The review that takes place in 2006 of the Community emissions trading scheme should examine the extent to which large hydro-electric power production projects have been established which may have negative environmental and social impacts.

- Prevention of the risk of double counting of emissions covered by the Community emission allowance trading scheme and emission reductions from some JI projects:

By placing direct emissions from certain activities in a regulatory framework where the total quantity of emissions are capped, the Community emission allowance trading scheme does not create the risk of "double counting". As a result of the harmonised and consistent coverage of the power and heat generation sector, Member States may not allocate any allowances to installations generating power from carbon-free sources or to installations consuming power, heat or steam (indirect emitters).

Double counting in the context of linking project credits to the Community trading scheme may happen, if ERUs are issued as a result of emission reductions generated through projects undertaken within the Community that also lead directly or indirectly to a reduction or limitation in emissions from an installation covered by the Community emission trading scheme. Double counting needs to be prevented both from the environmental and economic point of view. Generating ERUs, while freeing up allowances at the same time, implies a loosening of the overall cap that is pursued, as ERUs exchanged into allowances entitle the holder to increase emissions to the same amount as they have been reduced via a JI project. Economically, double counting would distort competition in the liberalised European power market. While existing carbon-free sources would not receive any allowances in the initial allocation in the framework of the national allocation plans, new investments in carbon-free sources can not be awarded ERUs for conversion into allowances either.

Double counting should be forbidden following the basic principle that one tonne of carbon dioxide emissions shall be accounted for only once and a reduction of it not be rewarded more than once. For that reason, an installation covered by the Community emission allowance trading scheme cannot be, at the same time, eligible under JI. This problem is very likely to happen with JI projects undertaken in the energy supply and demand sector in Acceding countries whose emissions are capped as Annex I countries.

To avoid double counting, the proposal requires that no ERU be issued for reductions that affect directly or indirectly emissions at installations covered by the emissions trading Directive 2003/…/EC. This is consistent with Article 6 of the Kyoto Protocol requiring Annex I Parties involved to approve JI projects in as far as Member States should not

[36] See final report of the World Commission on Dams: *Dams and Development: A New Framework for Decision-Making*, published in November 2000.

approve projects which may result in double counting of emissions. Even though it is not in a host Member State's interest to double-count emissions as it would have greater difficulties to comply with its Kyoto target, it is important to regulate this issue at Community level in order to preserve the environmental integrity of the trading system based on an accurate accounting of emissions and to avoid distortions of competition (e.g. in the liberalised EU electricity market). The Committee carrying out tasks related to Directive 2003/…/EC may develop guidelines on the avoidance of double counting.

- Transitional provision on the continuation of JI activities that affect the EC emissions trading scheme in Acceding countries

The Commission acknowledges the efforts made by certain Member States and candidate countries in implementing JI at an early stage, even before the design of the Community emission allowance trading scheme is finalised. Many Acceding countries will join the EU on 1st May 2004 and, by then, the Community emission allowance trading scheme will be part of the *acquis communautaire*.

This proposal gives the possibility to temporarily exempt JI activities that would normally fall under the scope of emissions trading Directive 2003/…/EC which are approved before 31 December 2004, or where later, the date of a country's accession to the EU to be continued as JI projects and generate ERUs until 31 December 2012. However, with the view of avoiding any double counting of emissions, the proposal requires that, in respect of such project activities, no allowances shall be allocated in the national allocation plan in respect of emission reductions resulting from those project activities.

The main reason is that the "transformation" of an on-going JI project into an installation subject to allowance trading may result in legal and contractual difficulties for both the investor and the host country who have made a bilateral arrangement for the acquisition and transfer of ERUs. Under the Community emission allowance trading scheme, it is the Member State where the installation is located that is responsible for allocating allowances to the operator. Consequently, it is up to the country hosting the on-going JI project to decide whether this activity should temporarily be exempted from the trading scheme or not. It could decide not to do so and allocate allowances on the basis of the baseline that was initially designed for the JI project.

- Linkages and synergies with existing Community environmental legislation and the EU Strategy on Sustainable Development:

➢ Requirement to take account of the *acquis communautaire* for the establishment of baselines for project activities undertaken in countries having signed an Accession Treaty with the EU.

Under the Kyoto Protocol, JI and the CDM must achieve additional reductions to those that would have happened otherwise, and the Marrakech Accords state that a baseline shall be established taking into account relevant national policies and circumstances, such as sectoral reform initiatives, local fuel availability, power sector expansion plans, and the economic situation in the project sector[37]. Wherever the country hosting

[37] Decision 16/CP.7 Guidelines for the implementation of Article 6 of the Kyoto Protocol): "*The baseline (…) is the scenario that reasonably represents the anthropogenic emissions by sources (…) that would occur in the absence of the proposed project. A baseline shall cover emissions from all gases, sectors and source categories listed in Annex A to the Kyoto protocol (…) within the project boundary*".

JI or CDM projects have a legislation setting precise requirements that have an impact on greenhouse gas emissions, this legislation should be fully taken into account for the purpose of baseline setting. Acceding countries are committed to align their national laws, rules and procedures with the entire body of EC legislation, the so-called *acquis communautaire* and EC legislation requirements should be seen as part of the baseline for JI projects undertaken in those countries.

- Requirement to take account of environmental and social impacts of project activities in which Member States are involved:

  The Marrakech Accords affirm that it is the host country's prerogative to confirm whether JI and CDM projects assist it in achieving sustainable development. However, it is the Member States' responsibility to approve JI and CDM projects in which they or their legal entities are involved. This proposal requires Member States to take account of environmental and social impacts of project activities in which they participate or which are undertaken by legal entities they authorise to participate, both for project approval and when emission reductions are monitored and verified). Taking account of economic, social and environmental impacts in the project approval process will ensure that approved JI and CDM projects effectively contribute to sustainable development. Since participation in JI and the CDM is voluntary, the proposed provision encourages the private sector to enhance corporate environmental and social responsibility and accountability in accordance with the Plan of Implementation agreed at the World Summit on Sustainable Development in Johannesburg.

- Public access to information on JI and CDM project activities:

  This proposal ensures that information on project activities is also made available to the public. This provision applies to projects outside the territory of the Community in which a private entity participates, as this participation is under the responsibility of the Member State.

- Environmental impact assessment of national strategies/programmes for JI/CDM implementation:

  This proposal invites Member States to assess the environmental impacts that may result from national strategies or programmes for the implementation of JI/CDM projects and to consult the public prior to their adoption. This provision implements both the Aarhus Convention and the Directive 2001/42/EC of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment (Strategic Environmental Assessment for policies, plans and programmes (SEA)).

- Possibility for EMAS verifiers to verify emission reductions from JI project activities within the Community:

  Only designated operational entities that are accredited by the CDM Executive Board can validate projects and/or verify and certify emission reductions under the CDM. Under the "fast-track" procedure for JI (when the host party meets all participation (monitoring and reporting) requirements provided for in Section D of Decision 16/CP.7), Annex I Parties can decide who to designate for verifying emission reductions. The proposal gives to Member States the opportunity to designate environmental verifiers that are involved in EMAS to verify emission reductions from JI fast track activities within the Community. The advantage is to benefit from existing

accreditation bodies and procedures established in accordance with Article 4 of Regulation 761/2001/EC[38] of 19 March 2001 of the EMAS Regulation. However, beyond a sound knowledge on climate change issues, environmental verifiers under EMAS would have to demonstrate that they have the necessary expertise and understanding of the JI project cycle requirements.

[38] Regulation 761/*2001*/EC of 19 March 2001 allowing voluntary participation by organisations in a Community Eco-management and audit scheme (EMAS), see accreditation requirements in Annex V.

ANNEX 1: LIST OF PARTICIPANTS ECCP WORKING GROUP JI/CDM (2002)

	Organisation	Name
UNFCCC	CDM Executive Board	Jean-Jacques Becker
Financial Institutions	EBRD	Jacquelin Ligot, Nathalie Roth
	EIB	Peter Carter
Accession countries	CZ Republic, Ministry of the Environment	Tomas Chmelik
	Poland, Ministry of the Environment	Jacek Mizak
Member States	AUST, Ministry of Agriculture, Forestry and Environment	Dieter Beisteiner
	DE, Environment ministry	Patrick Graichen
	SW, National Energy Agency	Jürgen Salay
	DK, Danish Environment Protection Agency	Eva Jensen
	FR, Inter-ministerial Task Force on Climate Change	Philippe Meunier
	NL, Ministry of Economic Affairs	Maurits Blanson Henkemans
	NL, Ministry of Environment	Hans De Waal
	UK (DEFRA)	Martin Hession
	UK (DEFRA)	Jackie Jones
Private sector	ABB Europe	Georg Brodach
	E5 Essent Sustainable Energy	Jan Willem van den Ven
	Edison	Fabio Proverbo
	ENDESA	David Corregidor
	Entreprises pour l'environnement	Patrick Nollet
	EURELECTRIC	William Kyte, John Scowcroft
	EUROFER	Hans Regtuit
	Euro-Heat & Power	Raffaele Piria
	Gaz de France	Christine Fedigan
	Lafarge	Chris Boyd
	RWE Rheinbraun	Dr Engelhard
	Shell	Toby Philip Campbell-Colquhoun
	UNICE	Mike Wriglesworth
Consulting sector	Andersen/Deloitte and Touch	Fiona Gadd, Paul Lamb, Robert Casamento
	ECOFYS	Dian Phylipsen
	ESD	Mike Bess, Ash Sharma
	Eco-Securities	Pedro Moura Costa, Paul Soffe
	KWI	Manfred Stockmayer
NGOs	CAN (Climate Action Network Europe)	Jason Anderson, Rob Bradley
	CAN Central and Eastern Europe (CANCEE)	Lidija Zivcic
	FIELD	Jurgen Lefevere
	WWF	Stefan Singer, Giulio Volpi
European Commission	DG DEV	Marc Debois, Maria Lamin
	DG ELARG	Yrjo Makela
	DG ENTR	Joachim.Ehrenberg, Anna Sole Mena
	DG ENV	Jos Delbeke, Matthieu Wemaëre, Peter Vis, Peter Zapfel, Thomas Verheye, Stefan Vergote.
	DG TREN	Franz Söldner, Gerasimos Potamianos, Haakan Karlström

ANNEX 2: MAIN CONCLUSIONS FROM THE ECCP WORKING GROUP ON JI/CDM (2002)

- JI and CDM projects should achieve additional emission reductions cost-effectively and result in real, measurable and long term benefits related to the mitigation of climate change while contributing to the achievement of sustainable development goals of host countries, notably through the transfer of environmentally sound technologies.

- To complement abatement action at home, participation in JI and the CDM should be facilitated, bearing in mind that domestic action shall constitute a significant element of the abatement effort to be made to meet Parties' targets under the Kyoto Protocol.

- One way of facilitating the private sector's engagement in JI and the CDM is to recognise JI and CDM credits towards fulfilment of domestic obligations. In this respect, linking JI and the CDM to the forthcoming Community emissions trading scheme would stimulate the development of JI/CDM projects.

- Linking JI and the CDM with emissions trading is desirable from an economic point of view as it would increase the diversity of compliance options and should lead to a reduction of overall costs while improving the liquidity of the market.

- Linking JI and the CDM to the Community emissions trading scheme should be consistent with the Kyoto Protocol and the Marrakech Accords, the objectives of the Community emissions trading scheme, while safeguarding environmental integrity. The Community and its Member States should ensure that the use of JI and CDM credits is a supplement to the domestic abatement effort.

- In concrete terms, linking JI and CDM means that JI and CDM credits should be recognised in the Community emissions trading scheme and could be used by operators to fulfil their obligations.

- Linking as soon as possible is likely to create early demand for credits, reducing uncertainties and contributing to global sustainable development through early mitigation action in third countries. Linking is practicable as from the date credits are issued in accordance with JI and CDM provisions on crediting periods as laid down in the Marrakech Accords.

- The early adoption of legislation regarding the recognition of project credits should be pursued as a matter of particular priority. The Commission should aim to make its proposal for a Directive linking JI/CDM credits with the EU emissions trading scheme early in 2003. The Council and the European Parliament should aim at adopting this legislation so as to allow its implementation as from the commencement date of the EU emissions trading scheme.