

Federal Ministry for the  
Environment, Nature Conservation  
and Nuclear Safety



## **Summary Report**

**Programmatic Approaches to JI and CDM:  
Business Opportunities for Emission Reduction**

**10th CTI Seminar**

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## **1. Overview**

The 10th CTI Seminar on Programmatic Approaches of JI and CDM: Business Opportunities for Emission Reduction took place on November 2-3, 2009 in Seehotel Zeuthen, Berlin-Zeuthen, Germany. The seminar was initiated under the framework of the Clean Technology Initiative (CTI) and sponsored by the German Federal Ministry of Environment, Nature Conservation and Nuclear Safety. It was organized by DIW Econ GmbH in cooperation with the PoA Support Center of the Kreditanstalt für Wiederaufbau (KfW).

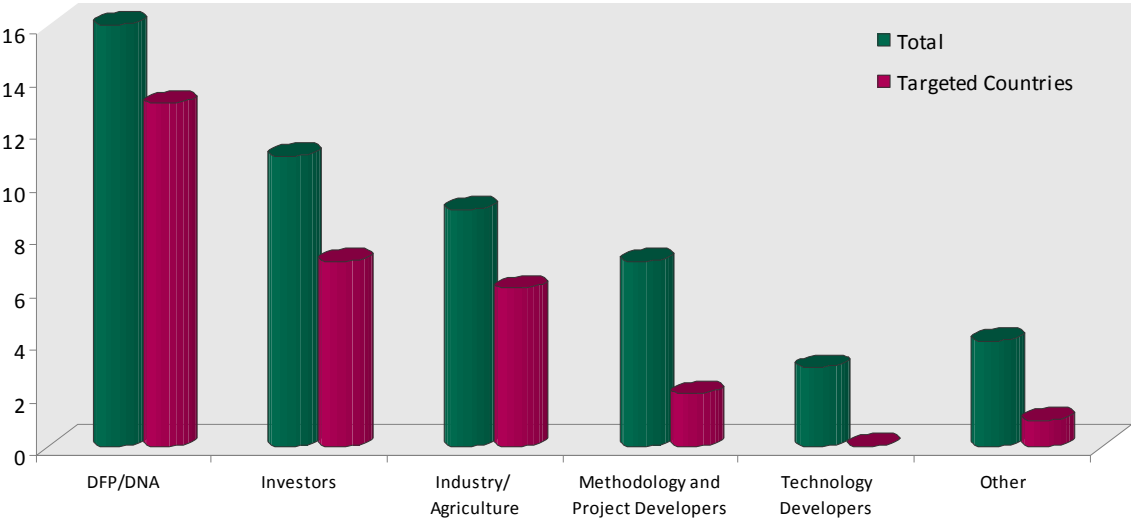
The seminar provided an opportunity for policy makers and financial institutions, companies from oil, gas, utilities and agricultural sectors, DNAs and governmental authorities as well as project developers to learn and to exchange existing experience in the field of idea generation, development and implementation of programmatic JI/CDM projects. The goal of the seminar was to raise awareness about existing and potential programmatic JI/CDM project opportunities in East European EU Member States, in Russia and Ukraine, as well as in Azerbaijan and Central Asia, and to promote interest in flexible programmatic mechanisms among large industry representatives, banks and governments of the targeted regions. Furthermore, the seminar was designed to inform the participants about additional business opportunities offered by programmatic JI/CDM projects, best PoA practices, methodologies and options for financing PoA project ideas. The seminar also discussed the challenges of PoAs and the opportunities for overcoming existing barriers. (For more details of the program see Seminar Agenda in Annex 1).

## **2. Participants in the seminar**

During the two-day workshop, participants heard 24 presentations and were offered an opportunity to set up and to participate in business-to-business meetings to discuss the specifics of their on-going or potential PoA projects with investors, technology developers and PoA experts. The presentations and discussions conducted during the seminar indicated a general agreement about the importance of JI/CDM PoAs as instruments for reducing GHG emissions in the future. The participants expressed optimism about further development of projects under the framework of programmatic flexible mechanisms in the post-Kyoto future. However, they expect the upcoming COP 15 in Copenhagen to clarify the direction in which this development should take place and to facilitate approval procedures.

Overall, 51 participants took part in the seminar. The largest group of participants represented DNAs/NFPs and National Agencies. These institutions are especially relevant for the development of PoAs since a clear political and legal framework for the functioning of flexible mechanisms is needed. Two other important groups of participants were local financial institutions and companies from the energy and agricultural sectors, which have sufficient capacities to become initiators and operators of programmatic JI/CDM projects in the future. (The list of participants is included in Annex 2).

*Graph 1 . Distribution of participants by type of represented organization*



**3. Status of PoAs: Brief target country overview**

Up to now, Russia, Ukraine and Azerbaijan, as well as the countries of Eastern Europe and Central Asia, have achieved very different levels of success in setting up a political, institutional and economic framework for the development and implementation of programmatic JI/CDMs.

In most of the targeted countries, governmental institutions (ministries, DNAs/NFPs) act as initiators of the existing PoA project ideas. Initiation of PoA projects, however, is not the prerogative of only governmental institutions. Profits, which can be gained from trading CERs, make PoAs attractive for individual banks and companies. Some of the privately initiated PoA project ideas were presented during the 10<sup>th</sup> CTI Seminar as well.

The experience of some Eastern European countries demonstrates that small scale activities leading to the reduction of GHG emissions do not necessarily have to be implemented and

sponsored under the framework of flexible JI and CDM. There are alternative ways to finance the realization of programmatic approaches, such as with funds made available through Green Investment Schemes (GIS).

Overall, the seminar has shown that the development of programmatic flexible mechanisms is only at its earliest stages in most of the represented countries. None of the targeted countries have a PoA project that has already been implemented. The lessons drawn from the seminar, therefore, are based on programmatic JI/CDM project ideas or projects which are currently being developed.

The summary of information about current stages of PoA development in the targeted countries that was made available during the seminar is presented below:

#### *Azerbaijan*

SOCAR, the state oil company of Azerbaijan, is actively developing projects for the reduction of GHG emissions under the framework of CDM. The programmatic approach to CDM is considered by SOCAR for implementation of particularly small emissions-reducing projects. Examples of potential areas for future implementation of programmatic CDM projects in SOCAR are:

- Installation of energy efficient gas transportation equipment
- Prevention of leaks from old and inactive oil wells
- Distribution of incandescent electric lamps in the company's administrative buildings
  - SOCAR has already conducted a pilot project on the replacement of electric lamps with more energy efficient ones in the building of its ecological department, which led to over 17 tons of CO<sub>2</sub> reduction

#### *Czech Republic*

Starting in 2009, the government of Czech Republic has actively subsidized small GHG emissions-reducing projects using its Green Investment Scheme (GIS) funds. The subsidies support projects in three major areas:

- Energy saving (thermal insulations)
- Building construction
- Renewable energy solutions for hot water preparation and additional heating

### *Estonia*

Numerous JI projects are currently being successfully implemented in Estonia. However, there is no record of any PoA projects currently being developed or already implemented in this country.

### *Kazakhstan*

Kazakhstan's usage of flexible mechanisms is complicated by the country's undefined status under the Kyoto Protocol.

- As a Party to Annex I of the Kyoto Protocol, Kazakhstan cannot use the CDM framework for its projects
- The country also cannot use the JI framework, because it is not a Party to Annex B of the Protocol
- The status of Kazakhstan will be considered during COP 15 in Copenhagen

Kazakhstan's undefined status under the Kyoto Protocol as well as the consequences of global financial crisis led to the postponement of a potential PoA project on the modernisation of communal boilers. To avoid complications in climate change projects due to the country's unclear status under the Kyoto Protocol, Kazakhstan has been implementing GHG emissions-reducing projects only on a voluntary basis.

### *Kyrgyzstan*

Several CDM projects have been developed in Kyrgyzstan so far, but similar to other countries in the region Kyrgyzstan has no experience with PoAs. Potential for programmatic CDM is detected in small hydro power and in the biomass sector. The Kyrgyz Electric Power Plants JSC has suggested the modernization of their plants in order to reduce the country's GHG emissions.

### *Latvia*

The Latvian government uses the Green Investment Scheme in order to finance programmatic JI via selling surplus Assigned Amount Units. The programmatic approach is applied in current tenders for increased energy efficiency in Municipalities' and Public Education Establishments' Buildings, as well as for conversion to renewable energy resources.

### *Mongolia*

The Mongolian Agrocomplex, which belongs to the private NTIC group of companies, is considering using the framework of programmatic CDM for installing biogas equipment near milk production plants for the utilization of cow manure to generate energy.

### *Poland*

Poland has 12 approved JI projects. The two PoA projects that have been approved by the Polish government so far have been initiated by BOS Bank (Bank for Environmental Protection).

- BOS Bank cooperates with the German KfW bank to develop a programmatic JI project on increasing the energy efficiency of residential and public buildings - the project has already passed the PDD verification stage.
- Another programmatic JI project of the BOS Bank is dedicated to the modernisation of boilers in Polish plants.

### *Russia*

Because of the particularly stringent and lengthy bureaucratic procedure of JI approval as well as the lack of political interest, up to now there have been no successfully implemented JI projects in Russia, in spite of the stock of project proposals in the pipeline. Recently the Russian government accepted the following changes in Russian JI procedures with the aim of improving the situation:

- Facilitation of project approval by lowering the level at which approval decisions are made (instead of the whole government, now only the Ministry of Economic Development is responsible for project approval)
- Reviewing process is based exclusively on the “know-how” system of Sberbank
- No restriction on the assignment of emission reduction certificates after 2012
- No Russian accreditation for IEs
- Acceptance of an emissions registry, which will be provided by and supported by Sberbank

### *Serbia*

Despite relatively recent ratification of the Kyoto protocol, the Serbian government is actively considering the use of programmatic flexible mechanisms to cut its GHG emissions. The following spheres for potential implementation of PoAs in Serbia were mentioned:

- Distribution of energy efficient lamps
- Biogas installations in the landfills and agricultural sectors

- Forestation and reforestation of the Serbian territory

### *Turkmenistan*

Turkmenistan had a very late start in considering the implementation of flexible mechanisms. Up to now the country has made only a few first steps towards building its capacity in the field of flexible GHG-reducing mechanisms.

- DNA office was established only very recently
- No programmatic CDM projects are currently being developed

### *Ukraine*

As one of the most successful users of the JI mechanism among non-EU countries, Ukraine has favourable conditions for the development and implementation of programmatic flexible mechanisms. However, the country still has not adopted a procedural plan for the legalization and development of programmatic JI projects in its territory. Despite the shortage in programmatic JI procedures, some initiatives and ideas for the implementation of a programmatic JI framework in Ukraine already exist:

- In cooperation with KfW and GFA Envest GmbH, Ukraine is developing a PoA project on the distribution of energy-efficient fluorescent light bulbs in buildings of the Ukrainian Ministry of Education
- Other spheres for potential implementation of programmatic JI framework are being considered:
  - Bioenergy activities
  - Regional rehabilitation of district heating systems

### *Uzbekistan*

Among the Central Asian republics, Uzbekistan has been quite active in using the CDM mechanism. There are many opportunities for the implementation of a programmatic framework in the country as well. According to the Uzbek DNA, programmatic CDM projects could be developed in the following fields:

- Distribution of more energy efficient lamps in rural households and factories (The project is currently being developed)
- Small hydro plant construction
- Introduction of solar collectors to provide hot water supply
- Biogas installations in local factories, farmhouses and landfills

## 4. Barriers to development and implementation of PoAs

The use of the PoA framework for small scale emissions-reducing projects is not always simple. Numerous barriers to the successful development and implementation of programmatic JI/CDM projects were mentioned by the seminar participants.

### 4.1 Financing

One of the most widespread problems faced by public and private organizations that are involved in the development of PoA projects is a lack of financing:

- The expenses required for the development, verification and monitoring of PoAs are substantial, even though the transaction costs of programmatic JI/CDM projects, which include a considerable number of project activities, are lower than the transaction costs of single small scale JI/CDM projects
- PoAs need upfront seed funding
- Investors face a high degree of uncertainty about the amount of CERs received during the implementation stage of the project
- Project developers face a short crediting period due to the unclear future of PoAs in the post-Kyoto regime
- Distribution of technology during the project implementation phase is costly

However, different opportunities exist to assist the development of PoAs and to overcome the financing barrier. Among them are the following opportunities:

- The PoA Center of KfW provides funds for supporting PoA initiatives at their development stages. For example,
  - The Center bought 15,000 certificates with an upfront payment in order to cover the costs of project development and the initial production of CFLs to support the Ukrainian programmatic JI project
  - The Center is also assisting the Polish BOS bank with financing the development of a PoA project on increasing the energy efficiency of public and private buildings in Poland
- The Post-2012 Carbon Credit Fund offers financing for programmatic JI/CDM projects independently of what post-Kyoto regime will enter into force after 2012
- National banks can act as operators of PoAs, partially covering transaction costs of the project
- Funds raised by some countries through GIS can also be used to finance small scale PoA projects

## 4.2 Other barriers

Though it is a significant barrier, a lack of financing for PoAs is not the only problem faced by developers, operators and other participants in programmatic JI/CDM projects. Other barriers hindering the development of PoAs that were mentioned during the seminar and in the seminar evaluation forms are:

- Lack of governmental involvement in and support for PoA projects
  - Absence of appropriate legal and institutional framework
  - Weak political interest
  
- Lack of information on PoAs and of PoA-relevant capacities
  - Little experience and almost no examples of functioning PoA projects
  - Many participants had no experience with PINs and PDDs for PoAs
  
- Complexity of PoAs at the development stage
  - Long duration of PoA approval process
  - Difficulties with choosing the appropriate methodology
  - Difficulties with forecasting true emissions reductions
  
- Complexity of PoAs at the implementation stage
  - Need to coordinate multiple actors involved in each individual PoA project
  - Difficulty of verification and monitoring procedures
  
- Low or no interest in using energy-efficient technologies among individual businesses and households due to:
  - Absence of a legal base
  - Low fuel prices in some developing regions
  - Insufficient information
  - Lack of practice
  - Cultural specifics of the society
  
- Substantial business risk
  - Insecurity about pay-off period
  - Uncertainty about what to do with PoA projects if pay-off period is not realized
  
- Current difficult economic conditions

### **4.3 Solutions to the existing barriers**

Cooperation between all parties involved in the initiation, approval and operation of PoAs is necessary in order to reduce the existing barriers to the future development of programmatic flexible mechanisms in the international community.

With the help of international institutions, national governments must be encouraged to speed up the development of national legal and institutional frameworks for the approval and functioning of PoAs in their countries. Without this framework, the successful development of PoA projects is not possible. Moreover, international and national authorities must cooperate on simplifying PoA approval processes in order to prevent stagnation in the project pipeline. For example, a simpler and shorter approval scheme can be introduced for PoA projects which use already existing and approved emission-reducing methodologies.

Simplification of PoA approval procedures will contribute to the reduction of project transaction costs. Lower transaction costs are necessary to reduce the financial pressure faced by individual PoA project initiators. Therefore, all other parties involved in the project development stage of PoAs should also consider other opportunities for decreasing initial transaction expenses – for example, by standardizing the procedures for writing PINs and PDDs. Problems related to financing of PoAs at early stages of project implementation can be further alleviated by extending the publishing of CERs beyond 2012. This step will allow a longer crediting period and thus decrease the riskiness of PoA projects for seed and other investors.

Participation of relevant parties in workshops on specific steps of PoA development and implementation and on specific regions/countries can help reduce informational shortage and to build national capacity in the field of programmatic flexible mechanisms. International authorities should also improve the availability of instructions for the development of PoA projects and provide sufficient informational material that explains these instructions in a more approachable manner.

Informational shortage should also be eliminated at the level of individual companies and households whose use of energy efficient technologies makes up the individual activities of a PoA. Governmental authorities, PoA operators and investors should organize informational programs and marketing campaigns for energy efficient technologies in order to encourage firms' and households' participation in PoAs.

## 5. Conclusion

Programmatic approaches to JI and CDM are an interesting and useful instrument for directing additional resources and capacity toward GHG emission reduction. PoAs offer numerous business opportunities for different actors such as municipalities, utilities, banks and other private or public entities. Host parties of a PoA can generate revenues which otherwise could not be attained under standard JI or CDM projects. There is a vast potential for PoAs in all countries whose representatives participated in the seminar.

The seminar provided professional insights into the main requirements of PoAs and allowed participants to share experiences derived from PoA projects that are currently under development. Examples and potential sources of PoA financing were discussed during the seminar as well. Most of the seminar participants highlighted the issue of a shortage of information and a lack of capabilities for PoA development and implementation. Additional capacity building will be necessary in the future in order to ensure that the seminar's target countries are able to access the benefits of programmatic approaches to JI/CDM.

## Agenda

### „Programmatic Approaches of JI and CDM – Business Opportunities for Emission Reduction”

10th Seminar of the Climate Technology Initiative (CTI) in Germany,  
Zeuthen, 2 and 3 November 2009  
Venue: Seehotel Zeuthen, Fontaneallee 27/28, 15738 Zeuthen

#### Sunday, 1 November

##### Arrival

*19:30* Reception by the Federal Ministry of Environment at the Conference  
Hotel

#### Monday, 2 November

*9:00-10:00* Registration

*10:00-10:30* Opening of the Seminar

Welcome Address by

- Franzjosef Schafhausen, Federal Ministry of Environment
- Petra Opitz, DIW econ

Introduction – The perspectives of post-Kyoto regimes for project related  
activities (F.-J. Schafhausen, BMU)

10:30 – 12:00

### **Interest and Opportunities of PoAs**

- Why engaging in PoAs, (K. Oppermann, KfW)
- The host country perspective
  - ““Opportunities for programmatic CDM in the Republic of Uzbekistan”, (O. Basov, Ministry of Economy of Uzbekistan)
  - “Opportunities for programmatic CDM in the Republic of Serbia”, (S. Lazic, Ministry of Environment and Spatial Planning of Serbia)
  - The current situation in Russia (O. Pluzhnikov, Ministry of Economic Development of Russia)

Discussion

12:00 – 12:15

Coffee break

12:15 – 13:30

### **Continuation of Interest and Opportunities of PoAs**

- The technology perspective
  - Haase Energietechnik, (J. Meißner)
  - RWE, (A. Salgado-Wuttich)

Discussion

13:30 - 14:30

Lunch break

**Moderation:** K. Oppermann, KfW

14:30 – 16:00

### **Case Studies - Findings from of ongoing PoAs**

- PoA of Lighting in Ukraine, (Z. Kapor, GFA Envest GmbH)
- Energetic building rehabilitation in Poland, (M. Dusza, Bank Ochrony Srodowski SA)
- Boiler modernization, (R. Geres, Future Camp)

Discussion

16:00 – 16:15

Coffee break

16:15 – 18:00

### **Business-to-Business Meetings**

18:30

**Bonfire**

19:00

**Invitation to Dinner by the Federal Ministry of Environment**

## Tuesday, 3 November

**Moderation:** P.Opitz, DIW econ

9:00 – 11:00

### Requirements and challenges of PoAs

- How to deal with the basic requirements of PoAs in real activities – experiences of the KfW PoA Center (K. Oppermann, KfW)
- Status of important methodologies (B. Dransfeld, Perspectives)
- The national approval procedure for PoAs – Experiences with German PoAs (W. Seidel, DEHST)

Discussion

11:00 – 11:15

Coffee break

11:15 – 12:30

### New project ideas and status of the PoAs proposed at last year's seminar. (Participants' presentations)

- Draft PoA procedure for JI Track 1 in Ukraine. Potential projects in Ukraine, ( G. Geletukha, SEC Biomass)
- Experience with PoA in Ukraine: Challenges and solutions (J. Palmisano, eTrios Commodities)
- The boiler PoA in Kazakhstan (S. Vassilyev, Climate Change Coordination Centre)
- The biogas PoA in Mongolia (S. Regzen, Mongolian Biogas)

Discussion

12:30 – 13:15

Lunch break

**Moderation:** Th. Forth, BMU

13:15 - 14:15

### Continuation of presentations by participants

- PoA: Small Hydro Power Station (S. Sakenov, DFP Kazakhstan)
- PoA in Kyrgyz Heat Power Plants (J. Moldosanova, JSC Electric Power Plants)
- PoAs as an opportunity for SOCAR (A. Aliyev, SOCAR)

Discussion

14:15 – 15:45

**Financing PoAs – the seed funding challenge**

- Concepts for PoA pre-financing (J. Volmer, KfW)
- Increase of energy performance in local government buildings: Open GIS tender as a test for programmatic JI (I. Pruse, Climate Finance and Technology Division, Ministry of Environment of Latvia)
- GIS in Czech Republic: Financing of smaller projects (M. Fiala, Ministry of Environment of Czech Republic)
- Financing PoAs: Bridging the gap through post-2012 ERPA (A.Averchenkova, First Climate Group)

Discussion

15:45 – 16:45

**Coffee break and B2B meetings**

16:45 – 17:00

**Conclusions and outlook**

17:00

End of the Seminar

## Annex 2: List of Participants

N	Last Name	First Name	Organization	Country	E-mail
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