

JI DETERMINATION REPORT FORM (F-JI-DRep) - Version 01

(By submitting this form, an accredited independent entity requests the publication of a determination pursuant to paragraph 33 of the JI guidelines in accordance with paragraph 34 of the JI guidelines.)

Name of accredited independent entity (AIE)	TÜV SÜD Industrie Service GmbH	
Proposed	JI Project	
Title and reference number of project	Switch from wet-to-dry process at Podilsky Cement, Ukraine	
	Reference No. 0001	
Host Party(ies)	Ukraine	
Parties involved in the project	Ireland	
(Authorised) project participants	JSC Podilsky Cement	
, , , , , ,	CRH Finance Limited	
Small-scale project (yes/no)	No	

Brief description of project

The core of the proposed JI-project is the switch from wet-to-dry process at Podilsky Cement. In the case of proposed JI project the existing four wet kilns will be replaced with one modern dry kiln system. The raw material preparation in the dry cement production process will also be changed compared to the case of wet technology. The existing four wet kilns will be replaced by a four-stage calciner kiln system with a modern efficient grate cooler. The switch from wet-to-dry process at Podilsky Cement will lead to a significant improvement of the kiln economy and reduce remarkably the fuel consumption (kiln, heat exchanger) as well as the electricity consumption (raw milling, kiln, coal mill) for the operation of the plant in project case.

Thus the project leads to a significant reduction of CO_2 emissions in the project scenario in comparison to the baseline scenario. CO_2 is the only relevant GhG for this type of project.

The project has not yet been finally approved by the board of CRH. Without JI-revenues the project will not be feasible. No measures related to the project have been carried out so far.

The starting date of the project activity is defined as date of commissioning of the new equipment. Thus the starting date will be January 1st, 2009. The starting date of the crediting period will be January 1st, 2009, too. The crediting period will end on December 31st, 2012 with the end of the first commitment period of the Kyoto protocol.

The project has two project participants. The Project Participant of the Host Country Ukraine is JSC Podilsky Cement. JSC Podilsky Cement in Kamyanets, Ukraine is the owner of the project and also the owner of permits and licenses of the site. Second project participant from an annex 1 country is CRH from Ireland as holding company of JSC Podilsky Cement.

Determination report

General information on determination

(Please describe:

- > The scope of the determination process, including all documentation that has been reviewed and the names of persons interviewed during the determination process, as applicable;
- The AIE's determination team, including a list of all persons involved in the determination process and a description of the functions assumed.)

The determination scope is defined as an independent and objective review of the project design document (PDD), the project's baseline study and monitoring plan and other relevant documents. The information in these documents is reviewed against Kyoto Protocol requirements, UNFCCC rules and associated interpretations. TÜV SÜD has, based on the recommendations in the Validation and Verification Manual (see www.vvmanual.info), employed a risk-based approach in the determination, focusing on the identification of significant risks for project implementation and the generation of emission reductions.

This report is based on the PDD version of July 3rd, 2006 (PDD version No. 1.3). This version was published in the context of the Global Stakeholder Process (GSP) on the website of www.netinform.de (link see chapter 4). Potential stakeholders have been invited for commenting by using the Climate-L announcement list service.

According to CARs and CRs indicated in the audit process the client decided to revise the PDD.

The final version of the PDD was published in a second stakeholder process from October 27 to November 25, 2006. (version 2.0, dated August 29th, 2006), which served as the basis for the final conclusions presented herewith. Again potential stakeholders have been invited for commenting by using the Climate-L announcement list service, but no comments were received.

Studying the existing project documentation (for complete list of interviewed persons and revised documents see Annex 2 of Final Determination Report), it was clear that the competence and capability of the validation team has to cover at least the following aspects:

- Knowledge of Kyoto Protocol and the Marrakech Accords
- Environmental and Social Impact Assessment
- Skills in environmental auditing (ISO 14000, EMAS)
- Quality Assurance
- Technologies, processes and operation of Cement plants
- Fuel switch
- Baseline concepts
- Monitoring concepts
- Political, economical and technical random conditions in host country

According to these requirements TÜV SÜD has assembled a project team in accordance with the appointment rules of the TÜV certification body "Climate and Energy":

Thomas Kleiser is head of division CDM and JI at TÜV Industrie Service GmbH. In this position he is responsible for validation, verification and certifications processes for GHG mitigation projects as well as trainings for internal auditors. He has already conducted more than 60 validations and verifications of CDM and JI projects.

Olga Mikhaylyuk participated as local auditor in the audit and functioned as local expert. Olga has received extensive training in the CDM and JI validation (determination) processes.

Furthermore further experts of the Munich team of carbon management service in TÜV SÜD have been partially involved in the project.

The audit team covers following requirements:

- Knowledge of Kyoto Protocol and the Marrakech Accords (All)
- Environmental and Social Impact Assessment (All)
- Skills in environmental auditing (ISO 14000, EMAS) (All)
- Quality Assurance (All)
- Technologies, processes and operation of Cement plants (Kleiser,)
- Fuel switch (Kleiser)
- Baseline concepts (All)
- Monitoring concepts (All)
- Political, economical and technical random conditions in host country (Kleiser, Mikhaylyuk)

In order to have an internal quality control of the project, a team of the following persons has been composed by the certification body "climate and energy": Werner Betzenbichler – Head of the Certification Body "Climate and Energy" and Javier Castro – Deputy head of the certification body

Description of determination process

(Please refer to:

- The review of the JI PDD and additional documentation attached to it;
- > The assessment against JI requirements, e.g. by using a determination protocol;
- The report of findings by the AIE, including the use of different types of findings (e.g. corrective action requests, clarifications or observations etc.).

Statements or assessments should be included in section "Conclusions, final comments and determination opinion" below.)

The determination of the project included three phases:

- 1. Desk Review
- 2. Follow up interviews
- 3. Resolution of clarification and corrective action requests

In order to ensure transparency, a determination protocol was customised for the project, according to the Validation and Verification Manual (VVM). The protocol shows, in a transparent manner, criteria (requirements), means of verification and the results from validating the identified criteria.

The determination protocol serves the following purposes:

- It organises, details and clarifies the requirements a JI project is expected to meet;
- It ensures a transparent determination process where TÜV SÜD has documented how a particular requirement has been validated and the result of the determination.

In the context of the determination process Outstanding Issues (OI), Corrective Action Requests (CAR), and Clarification Requests (CR) have been identified. Responses to these issues were compiled by the project participants. Subsequently a final evaluation of the aspect was carried out.

The completed determination protocol is enclosed in Annex 1 to the Final Determination Report.

Comments received from Parties, stakeholders and UNFCCC accredited observers (Please:

- > Summarise the comments received pursuant to paragraph 32 of the JI guidelines; and
- Provide a report of how due account was taken of these.)

TÜV SÜD published the project design document on its website for 30 days from July 3rd, 2006 to August 1st, 2006. Documents have been public available for commenting under the following link: www.netinform.de/KE/Wegweiser/Guide2.aspx?ID=1879&Ebene1 ID=26&Ebene2 ID=541&mode=1

A second publishing according to the requirements of the JI supervisory committee has been carried out from October 27, 2006 to November 25, 2006. The relevant web link is: www.netinform.de/KE/Wegweiser/Guide2.aspx?ID=2210&Ebene1_ID=26&Ebene2_ID=651&mode=1

In the first publishing period, one comment has been received, but the annotator did not identify himself as member of an NGO or another officially accredited body. Only under this pre-condition comments need to be considered in the determination process. Thus the comment will not be made publicly available in the determination process. Nevertheless the given comment has been taken account during the determination process as far as relevant for the determination process and final determination opinion.

Conclusions, final comments and determination opinion

(The requirements of Article 6 of the Kyoto Protocol and the JI guidelines and further relevant requirements defined by the COP/MOP or the JISC with regard to determinations pursuant to paragraph 33 of the JI guidelines have to be met.

Please provide:

- Conclusions on each of these requirements, describing how these requirements, in particular those referred to in paragraph 33 of the JI guidelines, have been met, including assessments and findings (e.g. corrective action requests, clarifications or observations) related to each requirement and statements on whether all issues raised have been addressed to the AIE's satisfaction;
- > Final comments and a determination opinion.)

All mandatory requirements for JI project activities have been revised. Corresponding responses have been compiled in detail in table 1 of Annex 1 to the Final Determination Report. The following reflects the main aspects revised:

	REQUIREMENT	Determin. Conclusion
1.	The project shall have the approval of the Parties involved	Ø
2.	Emission reductions, or an enhancement of removal by sinks, shall be additional to any that would otherwise occur	Ø
3.	The sponsor Party shall not aquire emission reduction units if it is not in compliance with its obligations under Articles 5 & 7	Ø
4.	The acquisition of emission reduction units shall be supplemental to domestic actions for the purpose of meeting commitments under Article 3	Ø
5.	Parties participating in JI shall designate focal points for approving JI projects and have in place national guidelines and procedures for the approval of JI projects	Ø
6.	The host Party shall be a Party to the Kyoto Protocol	
7.	The host Party's assigned amount shall have been calculated and recorded in accordance with the modalities for the accounting of assigned amounts	Ø
8.	The host Party shall have in place a national registry in accordance with Article 7, paragraph 4	☑
9.	Project participants shall submit to the independent entity a project design document that contains all information needed for the determination	Ø
10.	The project desing document shall be made publicly available and Parties, stakeholders and UNFCCC accredited observers shall be invited to, within 30 days, provide comments	Ø
11.	Documentation on the analysis of the environmental impacts of the project activity, including transboundary impacts, in accordance with procedures as determined by the host Party shall be submitted, and, if those impacts are considered significant by the project participants or the Host Party, an environmental impact assessment in accordance with procedures as required by the Host Party shall be carried out	Ø
12.	The baseline for a JI project shall be the scenario that reasonably represents the GHG emissions or removal by sources that would occur in absence of the proposed project	Ø
13.	A baseline shall be established on a project-specific basis, in a transparent manner and taking into account relevant national and/or sectoral policies and circumstances	Ø
14.	The baseline methodology shall exclude to earn CERs for decreases in activity levels outside the project activity or due to force majeure	Ø
15.	The project shall have an appropriate monitoring plan	Ø

Furthermore a concrete project checklist was compiled in form of a protocol that covered among others the following aspects:

- ✓ Project Design
- ✓ Baseline
- ✓ Duration of the Project
- ✓ Monitoring Plan
- ✓ Calculation of GHG Emissions
- ✓ Environmental Impacts
- ✓ Local stakeholder process

The concrete results are included to table 2 of Annex 1 of the Final Determination Report.

Final comments and determination opinion:

TÜV SÜD has performed a determination of "Switch from wet-to-dry process at Podilsky Cement, Ukraine" JI project in Kamyanets Podilsky in Ukraine. The determination was performed on the basis of all currently valid and relevant JI criteria.

The review of the project design documentation and the subsequent follow-up interviews have provided TÜV SÜD with sufficient evidence to determine the fulfilment of stated criteria.

The required Letters of Approval from the involved parties have been issued. The involved Parties have their Procedures and Guidelines for the JI projects published.

It is our opinion that the project meets all relevant UNFCCC requirements for JI. TÜV SÜD recommends this project for registration at the JI Supervisory committee.

Additionally the assessment team reviewed the estimation of the projected emission reductions. We can confirm that the indicated amount of emission reductions of 3 023 403 tons CO₂e (to be issued as ERUs) in the intended first crediting period from 2009 - 2012 (the first Commitment Period of the Kyoto Protocol lasts from 2008-2012), resulting in annual emission reductions of 755 851 tons CO₂e, represents a reasonable estimation using the assumptions given by the project documents.

The determination is based on the information made available to us and the engagement conditions detailed in this report. The determination has been performed using a risk-based approach as described above. The only purpose of the report is its use during the registration process as JI project. Hence, TÜV SÜD can not be held liable by any party for decisions made or not made based on the determination opinion, which will go beyond that purpose.

All requirements of Article 6 of the Kyoto Protocol and the JI guidelines and further relevant requirements defined by the COP/MOP or the JISC with regard to determinations pursuant to paragraph 33 of the JI guidelines are met:

X Yes

□ No

List of documents attached to the determination report

(Please attach:

- ✓ The JI PDD of the project;
- ✓ Written approvals by all Parties involved in an alphabetical order; and

Other relevant documents, e.g. any determination protocol used in the determination process, a list of persons interviewed by the AIE's determination team during the determination process; and check mark below accordingly.)

- X JI PDD of the project
- X Written approvals by the Parties involved
- X Other documents:
 - X Determination protocol
 - X List of persons interviewed
 - X Any other documents (please list):
 - Annexes to PDD (confidential) as listed on front page of PDD (Annex 5: Projected Non-CO $_2$ Emissions in 2010; Annex 7: Time schedule; Annex 8: Plant layout)
 - Confidential Documents on financial calculation (with and without consideration of ERU)
 - CO₂ Protocol (Excel)

The AIE herewith declares that undertaking the determination for the proposed JI project referred to above does not constitute a conflict of interest which is incompatible with the role of an AIE under JI.

Name of authorized officer signing for the AIE

Werner Betzenbichler

26. Jan 2007

Date and signature

