



*Experiences, Challenges and Difficulties  
in Validation and Verification*

*March 22, 2010*

*Miracle Grand Convention Hotel,  
Bangkok*

**SPEED UP EMISSIONS  
VERIFICATION, PLEASE!**

WHEN YOU NEED TO BE SURE



### The **WORLD'S LARGEST**

*independent testing, inspecting, verification and quality certification organization*

<b>Origin:</b>	<i>European</i>
<b>Founded:</b>	<i>1878</i>
<b>Headquarters:</b>	<i>Geneva</i>
<b>Employs:</b>	<i>43,000 employees</i>
<b>Network:</b>	<i>140 countries</i>
<b>Offices:</b>	<i>1,000 offices</i>
<b>Laboratories:</b>	<i>600 laboratories</i>



- ✓ **SGS inspects 5% of World trade annually.**
- ✓ **Every 3 seconds 24 hrs a day 365 days a year SGS starts an inspection.**



## *Experience in Validation/Verification of Emission Reduction Projects*

- *SGS is one of the leading service providers for validation and verification of CDM and JI projects (Kyoto Protocol)*
  - *>330 validations and >80 verifications*
  - *Market share in CDM: validation 15%, verification 30%.*
  - *Market share in JI: 10%.*
  
- *More than 200 competent and trained staff globally.*
- *Regional Technical Competence Centers in China, India Europe and Latin America.*
- *Voluntary Carbon Standard (VCS) validation & verification available (SGS is Member of Steering Committee)*

## *Experience in Validation/Verification of Emission Reduction Projects (cont.)*

- *Add-ons to verify extra sustainable development benefits to CDM and VCS verification available*
  - *Gold Standard*
  - *FSC (Forest Stewardship Council) and CCBA (The Climate, Community & Biodiversity Alliance) for forest projects*
  - *ISO 14064 The Guidance for GHG reporting & verification*
  - *WCD (World Council for Dam)*
  - *WRI/WBCSD, SGS is one of founder member of WBCSD and support the various initiatives*



World Business Council for  
Sustainable Development



WORLD  
RESOURCES  
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## Validation and Verification of CDM Projects

- **Why delays?**
  - *Understanding of the requirements*
  - *Dynamic CDM – keep changing in evolving process*
- **Validation Approach – Validation and Verification Manual (VVM)**
  - *Estimation of total reduction emissions*
  - *Applicability, baseline assessment and additionality not reflect to actual project*
- **Issues – Validation**
  - *Letter of Approval*
  - *Applicability – baseline and monitoring methodology*
  - *CDM consideration and start date, Project starting before the start of validation*
  - *Baselines alternatives and Additionality*
  - *Monitoring Plan*
- **Issues – Verification**
  - *Changes Monitoring Plan from the methodology & approved PDD*
  - *Incomplete Monitoring Reports*
  - *Incomplete parameters & monitoring equipments*

### **Letter of Approval**

- The Party is a Party to the Kyoto Protocol*
- Participant is voluntary*
- Contributes to the sustainable development*
- Precise proposed CDM project activity title in the PDD*
- Issued by the respective Party's DNA*
- Authenticity of the LOA is to be verified*

### **Participation**

- PP listed in a consistent manner in project documentation (A.3. and Annex 1 of PDD).*
- Their participation has been approved by a Party to the Kyoto Protocol.*

## **Applicability – baseline and monitoring methodology**

- ❑ *Selected methodology is applicable to the project activity.*
- ❑ *PP has correctly applied the selected methodology.*
  - **Project boundary**  
*All sources and GHG required by methodology have been included.*
  - **Baseline identification**  
*Represent the anthropogenic emissions by GHG sources that would occur in the absence of proposed project activity.*
  - **Algorithms and/or formulae used to determine ERs**  
*Equation and parameters are correctly applied with adequate justification for the choice of data and parameters.*
  - **Additionality**  
*Reliability and credibility of all data, rationales, assumptions, justifications and documentation can be assessed.*
  - **Monitoring methodology**  
*Compliance of the monitoring plan with the approved methodology.*

## **CDM prior consideration and start date**

- New Project Activity (with a starting date on or after 02/08/2008)**
  - *A notification to a Host Party DNA and the UNFCCC secretariat to seek CDM status.*
  - *Such notification must be made within six months of the project activity start date.*
  - *Not necessary if a PDD has been published for global stakeholder consultation or a new methodology proposed before start date.*
- Existing Project Activity (a start date before 2 August 2008)**
  - *Demonstrate that the CDM was seriously considered in the decision to implement the project activity.*
  - *Indicate continuing and real actions were taken to secure CDM status .*

**EB49 Annex22**

## **Additionality**

- Reliability and credibility of all data, rationales, assumptions, justifications and documentation can be assessed.*

## **Baselines alternatives**

- Identification of credible alternatives to the most realistic baseline scenario are reliable and transparent.*

## **Investment Analysis**

- The accuracy and suitability of financial calculations for all input values.*
- The suitability of any benchmark applied has been assessed.*
- The underlying assumptions are appropriate and financial calculations are correct.*

## **Barrier Analysis**

- The barriers are real and supported by sufficient evidence.*
- The barriers prevent the implementation of the project activity but not the implementation of at least one of the possible alternatives.*

## **Common Practice Analysis**

- Geographical scope (Entire host country, transnational/ global etc.)*
- Essential distinctions between CDM project and the other similar projects.*

## Monitoring Plan

- ❑ *Compliance of the monitoring plan with the requirements of approved methodology.*
  - *The list of parameters required by the selected approved methodology.*
  - *Monitoring plan contains all necessary parameters and clearly described the means of monitoring.*
- ❑ *Implementation of the plan.*
  - *The monitoring arrangements described in the monitoring plan are feasible within the project design.*
  - *The means of implementation of the monitoring plan including the data management and quality assurance and quality control procedures are sufficient to ensure that emission reductions achieved by/resulting from the proposed CDM project activity can be reported ex post and verified.*

- *Ensure methodology used is applicable and correctly applied*
- *If in doubt, seek clarification, a revision or a deviation*
- *Ensure there is a valid letter of approval/authorisation Letter of Approval (LOA)*
- *Ensure all documentation submitted correctly and consistent with LOA*
- *Ensure small scale projects meet the small scale criteria - e.g. are not debundled components of other project activities*
- *Ensure barriers to demonstrate additionality are relevant & substantiated*

## Issues Verification

- *Incomplete Monitoring Reports (no parameters described, no calculations)*
- *Instruments not installed and calibrated according to Monitoring Plan*
- *Changes Monitoring Plan from the methodology and approved PDD that have not been approved by CDM EB*
- *Changes monitoring period (Crediting Period) after submission of the monitoring report to DOE*
- *Default value used in spreadsheet not up to date and Uncertainties not quantified*
- *QA / QC system not put in place*
- *Missing data (how to deal with missing data, back-up system)*

- ***STRICTLY FOLLOW GUIDANCE FROM EB!***  
*With every meeting more guidance becomes available*
- *Ensure that you use the newest documents available through the UNFCCC website – PDD, Methodology, Additionality and tool*
- *Do not make changes to the registered Monitoring Plan without consulting the DOE – clarification / deviation*
- *Ensure that you follow the registered Approved Methodology and Monitoring Plan – differences will be spotted and only result in delays*
- *Do not start with verification exercise until project is fully implemented and all is completed*



*Further information, please contact ...*

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***Thank you***