Revision in monitoring Plan

for

Energy efficiency project in the Ramla Cement Plant in Israel through instalment of new grinding technology

CDM project registration number: 0701

Date: 11/30/2008

(e) info@ecotraders-global.com ▪ (w): http://www.ecotraders-global.com

SECTION D. Application of a monitoring methodology and plan:

>>

D.1. Name and reference of approved monitoring methodology applied to the small-scale project activity:

>>

The project activity will use approved small scale methodology AMS II. D (Energy efficiency and fuel switching measures for industrial facilities) Version 07: 28 November 2005

D.2. Justification of the choice of the methodology and why it is applicable to the small-scale project activity:

>>

As outlined in section B.2, the project meets all the applicability criteria of this methodology; therefore it is justified to use methodology II.D. The aggregate energy savings from the project will be less than 15GWh per year.

D.3 Data to be monitored:

>>

ID number	Data variable	Source of data	Data unit	Measured (m), calculated (c) or estimated (e)	Recording frequency	Proportion of data to be monitored	How will the data be archived? (electronic/ paper)	Comment
1	Baseline electricity demand	Project Developer	MWh/ton	C	At beginning of each crediting period	100%	Electronic	Baseline electricity demand has been monitored for 3 years prior to the project activity
2	Annual Project Cement production	Project Developer	ton/year	M	Periodically	100%	Electronic	Data will be aggregated monthly and yearly.
3	Total Baseline Electricity Demand	Project Developer	MWh/ year	M	At beginning of each crediting period	100%	Electronic	Baseline electricity demand will be checked against

								electricity supplier's receipts
4	Grid Emission Factor	National Grid	tCO2e /MWh	M + C	At the beginning of each crediting period	100%	Electronic	The baseline grid emissions factor is calculated according to the procedures in methodology AMS-1.D
5	Project electricity demand	Project Developer	MWh/ton	C	Periodically	100%	Electronic	Data will be aggregated monthly and yearly
6	Total Project Electricity Demand	Project Developer	MWh/ year	M	Periodically	100%	Electronic	Data will be aggregated monthly and yearly. Electricity demand will be checked against electricity supplier's receipts
7	Project fuel consumption	Project Developer	Liter/year	M	Periodically	100%	Electronic	Data will be aggregated monthly and yearly
8	Fuel Emission Factor	IPCC	TCO2/ TJ	C	At beginning of each crediting period	100%	Electronic	
9	Fuel Density	Fuel Supplier	Kg/m3	C	At beginning of each crediting period	100%	Electronic	
10	Energy Content	IPCC	TJ/ton	C	At beginning of each crediting period	100%	Electronic	

D.4. Qualitative explanation of how quality control (QC) and quality assurance (QA) procedures are undertaken:

>>

Three meters are involved in monitoring the data necessary to calculate project emissions:

1. Scales
2. Electricity meter
3. Diesel flow meter

Scales

6 different scales measure the quantity of raw material (Clinker, Gypsum, Limestone, Fly ash) fed into the vertical mill. The measurement of 'annual project cement production' is received by summing the total raw material fed into the vertical mill.

These weights shall be calibrated annually by an external certified company. The calibration is carried out by placing a standard weight on the weighing instrument and ensuring that the reading is accurate.

The readings from the scales shall be inserted automatically and electronically into the CDM report.

Electricity Meter

This data is recorded from the main electricity meter of the vertical mill.

This meter shall be calibrated annually by the instrument supplier.

The readings from the main electricity meter shall be inserted automatically and electronically into the CDM report.

Diesel Flow Meter

This data is recorded from a flow meter installed on the pipeline supplying diesel fuel to the vertical mill.

This meter shall be calibrated once every three years by an external certified company.

The calibration is carried out by running a standard barrel of diesel through the flow meter and ensuring that the reading is accurate.

The reading from this meter shall be inserted automatically and electronically into the CDM report.

Since all data is recorded automatically and electronically this should eliminate inaccuracies caused by human error.

All reports shall be forwarded monthly to Ecotraders and EcoSecurities and any extraordinary events will be reported to the CDM project manager.

All records shall be kept for 12 years (crediting period + 2 years).

D.5. Please describe briefly the operational and management structure that the project participant(s) will implement in order to monitor emission reductions and any leakage effects generated by the project activity:

>>

Since the energy efficiency technology is neither transferred from another activity nor is a transfer of existing equipment, no leakage needs to be considered.

In order to monitor emissions reductions, a dedicated staff member has been nominated as CDM officer responsible for issuing the monthly CDM report and cross checking the data against other internal reports and measurements recorded at Nesher. In case discrepancies are found between the different data sources he notifies the relevant personnel and the meters are recalibrated. Maintenance and operation of the vertical mill is carried out by the cement grinding department. Maintenance and operation (including calibration) of the monitoring equipment in the vertical mill is carried out by the electricity department.

D.6. Name of person/entity determining the monitoring methodology:

>>

The monitoring study was concluded on 30/03/2006. The entities determining the monitoring methodology and participating in the project as Carbon Advisors are EcoTraders, Israel, and EcoSecurities Ltd., UK, listed in Annex 1 of this document.

Calculation methodology

- Emissions reduction

  $ER = BE\text{-}PE$

  Emissions reduction equals baseline emissions minus project emissions (no leakage is considered)

- Baseline emissions

  $BE = (Electricity_{baseline,\ i} * Q_{cement,\ i}) * EF_{grid}$

  Where:

  BE: baseline emissions
  $Electricity_{baseline,\ i}$: Baseline electricity consumption for cement type (*i*) (MWh/Tonne Cement)
  $Q_{cement,\ i}$: Quantity of cement type (*i*) produced in project scenario (Tonne Cement /yr)
  EF_{grid}: Carbon emissions factor of the electricity grid to which the project is connected (tCO2e/MWh)

- Project emissions

$PE = (Electricity_{project,\,i} * Q_{cement,\,i}) * EF_{grid} + (Fuel_{project,\,i} * EF_{fuel} * D_{fuel} * EC_{fuel})/1{,}000{,}000$

Where:

PE = project emissions
$Electricity_{project,\,i}$: Project electricity consumption for cement type (i) produced in project scenario (MWh/Tonne Cement)
$Q_{cement,\,i}$: Quantity of cement type (i) produced in project scenario (Tonne Cement /year)
EF_{grid}: Carbon emissions factor of the electricity grid to which the project is connected (tCO2e/MWh)
$Fuel_{project,\,i}$: Project fuel consumption for type cement (i) produced in project scenario (Liter/year)
D_{fuel} : Density of the fuel (Kg/m3)
EC_{fuel} : Energy content of the fuel (TJ/ton)
EF_{fuel}: The carbon emissions factor of the fuel (tCO2e/TJ)

- Grid emissions factor

The grid emissions factor was calculated at the beginning of the crediting period, as described in the validated Project Design Document.