

MONITORING REPORT

TAMILNADU SPINNING MILLS ASSOCIATION

Version 1.0
Dated 25th June 2010

Monitoring Period: 01/07/2009 to 31/03/2010

Title	“ Bundled wind power project in Tamilnadu, India co-ordinated by the Tamilnadu Spinning Mills Association (TASMA) ”
UNFCCC Reference No	0991
Registration Date	10th June 2007
Verification No	Eighth Verification

CONTENTS

- A. Introduction
- B. Project Reference
- C. Location
- D. Brief Description
- E. Period of Verification
- F. Monitoring Plan
- G. Baseline Emission Factor
- H. Emission Reductions
- I. Abbreviations

A. Introduction

Tamilnadu Spinning Mills Association (TASMA) (project proponent) has registered their large scale Clean Development Mechanism project namely “Bundled wind power project in Tamilnadu, India co-ordinated by the Tamilnadu Spinning Mills Association (TASMA)” with the Executive Board of United Nations Framework Convention on Climate Change.

As the next step, the project proponent has taken on the process of verification, for which this monitoring report is submitted. The project proponent had opted to go for a fixed crediting period of ten years. This monitoring report is prepared for the purpose of verification of emission reductions generated by the project activity. This report contains monitoring data starting 01/07/2009 till 31/03/2010.

B. Project Reference

Title	Bundled wind power project in Tamilnadu, India co-ordinated by the Tamilnadu Spinning Mills Association (TASMA)”
UNFCCC Reference No	0991
Registration Date	10 th June 2007
Crediting Period	01/01/2003 to 31/12/2012
Date of Monitoring Report	25 th June 2010

C. Location

The project sites are located at Udumalpet, Sencottah, Aralvaimozhi in the districts of Coimbatore, Tirunelveli and Kanyakumari in the Indian State of Tamil Nadu. All the projects are connected to the southern grid of India.

D. Brief Description

This project involves bundling of 704 wind mill sub projects. The small wind mill sub project owners, who own industries, have invested into wind energy generation encouraged by their Association - Tamil Nadu Spinning Mills Association (TASMA), and the generated wind power is used for meeting out their captive needs and/or to export to the grid. All the wind mills are connected to the grid of the Tamil Nadu Electricity Board (TNEB) which is a part of Southern Grid; situated within the State of Tamilnadu, micro-sited in many locations based on wind availability.

This wind based electricity generation aggregates to a total Installed capacity of 468 MW and the generation is expected to be approximately 860 GWh, annually.

The Project activity is coordinated by Tamilnadu Spinning Mills Association (TASMA). As per the agreement with the members of the Association, TASMA would have the ownership rights for the project activity and would be the sole transaction entity with the Executive Board of the United Nations Framework Convention on Climate Change.

E. Period of Verification

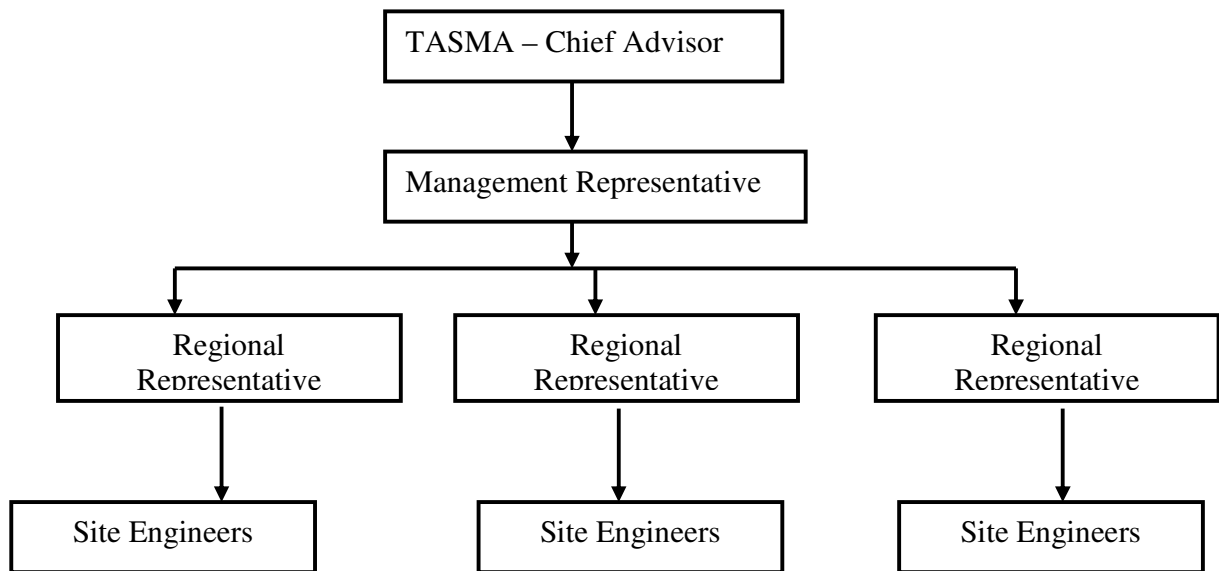
The project proponent wishes to get Emission Reductions certified for the period from 01/07/2009 to 31/03/2010.

F. Monitoring Plan

This project activity uses renewable energy that is wind, as source for power generation. No other fossil/non fossil fuels are involved and no fuel preparation or combustion takes place. Therefore, the net electricity generated by the project activity is the only parameter that needs to be monitored. The officially authenticated energy meter readings are noted by the TNEB authority on a monthly basis by way of TNEB statements/meter cards. The corresponding TNEB statements or meter cards will therefore testify the actual number of units exported to the grid and hence form the basis of Emission Reductions.

Structuring For Monitoring:

1. The following organization is in place for facilitating monitoring:



2. Identification of WTGs:

Each WTG which is part of the project activity will be uniquely identified. The ID number will have following structure:

Company ID+ WTG ID

3. Records Maintained

- TNEB statements/meter cards
- Meter wise Calibration certificate / Test report provided by TNEB

G. Baseline Emission Factor

The baseline emissions and the emission reductions from TASMA project activity are estimated based on the quantum of electricity exported by the TASMA project activity and the **Baseline Emission Factor (BEF)** of the chosen Southern Regional grid (India). The baseline emission factor (combined margin) has been calculated as per the guidance provided in ACM0002 (Version 06). The Baseline Emission Factor 0.932 tCO₂/MWh has been validated in the PDD.

H. Emission Reductions

According to the methodology outlined in ACM0002 (Version 06), Baseline emissions (BE_y in tCO₂) due to displacement of grid-electricity are the product of the Baseline Emissions Factor (EF_y in tCO₂/MWh), times the electricity exported by the TASMA project activity to the grid (EG_y in MWh), over the crediting period as given below.

$$BE_y = EG_y \cdot EF_y$$

Value for EF_y is declared as 0.932, in the validated/registered PDD.

The emission reductions ER_y by the project activity during a given year y is the difference between baseline emissions (BE_y), project emissions (PE_y), and emissions due to leakage (Ly), as follows:

$$ER_y = BE_y - PE_y - Ly$$

Where,

ER_y	Emission reductions of the project activity during the year y in tons of CO ₂
BE_y	Baseline emissions due to displacement of electricity during the year y in tons of CO ₂
PE_y	Project emissions during the year y in tons of CO ₂
Ly	Leakage emission during the year y in tons of CO ₂

As there are no project emissions and leakage in this case, Baseline emissions are equivalent to the emission reductions. The summary of the emission reductions calculated for the monitoring period is summarized in the following table.

Year	Net Export (KWh)	EF (tCO ₂ /MWh)	CERs
July 2009 to March 2010	741 318 418	0.932	690 909

The PDD's forecast emission reduction generation for the monitoring period i.e. 9 months is 515 023 CERs. The difference is due to varying wind resources throughout the months and a good wind year in 2009 and start of 2010.

I. Abbreviations

ACM	Approved Consolidated Methodology
BEF	Baseline Emission Factor
BM	Build Margin
CO2	Carbon dioxide
CEA	Central Electricity Authority
CER	Certified Emission Reductions
CDM	Clean Development Mechanism
CM	Combined Margin
KW	Kilowatt
MNES	Ministry of Non-Conventional Energy Sources
MW	Mega watt
MWh	Megawatt hour
MU	Million Units
OM	Operating Margin
PDD	Project Design Document
TASMA	Tamilnadu Spinning Mills Association
tCO2e	Tonnes of carbon dioxide equivalent
TNEB	Tamilnadu Electricity Board
UNFCCC	United Nations Framework Convention on Climate Change
WTG	Wind Turbine Generators