



**CLEAN DEVELOPMENT MECHANISM
PROJECT DESIGN DOCUMENT FORM (CDM-PDD)
Version 03 - in effect as of: 28 July 2006**

CONTENTS

- A. General description of project activity
- B. Application of a baseline and monitoring methodology
- C. Duration of the project activity / crediting period
- D. Environmental impacts
- E. Stakeholders' comments

Annexes

- Annex 1: Contact information on participants in the project activity
- Annex 2: Information regarding public funding
- Annex 3: Baseline information
- Annex 4: Monitoring plan

**SECTION A. General description of project activity****A.1 Title of the project activity:**

>> Bundled Wind power project in Tamil Nadu, India, co-ordinated by Tamil Nadu Spinning Mills Association (TASMA-II)

Version 1.2

09/03/2009

A.2. Description of the project activity:

>>

The project activity is a Bundled Wind power project in Tamil Nadu, India, co-ordinated by Tamil Nadu Spinning Mills Association (referred as TASMA II). The intent of the Project Activity is to reduce GHG emission and promote sustainable development by use of renewable energy (Wind) for generation of power by bringing together a number of investors with small power requirements to invest into wind turbines. It increases “collective bargaining” capacity with the WTG suppliers, pooling resources together to obtain CDM benefits, power purchase agreements, infrastructure support etc. The project has a high degree of complexity due to large number of investors / WTGs with different size, capacity, location, make, purpose, etc.

TASMA¹, an Association of textile mill owners, is founded to represent and address the problems and grievances of the Spinning Mills located in the State of Tamil Nadu in India.

The TASMA member units, keeping in mind the provisions of then impending Electricity Act, have been seriously considering captive power generation as an option-either as a separate single industrial unit or management managed by Association. TASMA has been considered various options of captive power generation². At this stage, Wind turbine manufacturers³ approached TASMA and presented them that keeping in mind the CDM benefits, the wind turbines for captive power generation and export of excess power to grid as a viable option. TASMA also has been encouraging its members to invest into wind energy and accordingly based on the investments made on wind energy from 2003 to 2005, TASMA has already bundled one project and the CDM project was registered⁴. Subsequent to applying for Host Government Approval for TASMA-I⁴ it has been decided that

¹ TASMA is (a non- profit organisation) a registered society registered under the Tamil Nadu Societies Registration Act 1975. (certificate of registration)

² The evidence will be submitted to DOE.

³ Record of wind turbine suppliers addressing TASMA members how investment in wind turbine is viable in view of potential CDM revenue.

⁴ TASMA I is a CDM project registered by UNFCCC, “Bundled Wind power project in Tamil Nadu, India co-ordinated by the Tamil Nadu Spinning Mills Association (TASMA) reference no 0991.



- I. The wind turbines that have come into operation from 2005 to 2007 to be bundled as the second project – TASMA II.
- II. And to include in the same bundle, the wind turbines commissioned prior to 2005, which could not be included in TASMA I as there has been delayed in submission of information/documents by the members and further they were waiting for some progress to be seen in the CDM projects on wind sector.⁵

It is to be noted that, this bundling activity has been envisaged and implemented in the absence of approved 'programmatic approach' and by design to reduce the transaction costs, TASMA has been bundling investments done during a period of three⁶ years. Considering the past experience of TASMA, it was then expected that the TASMA's second bundle would be of the order of 450 – 500 MW⁶.

TASMA –II now involves bundling of 812 small wind mill sub projects and the generated wind power is used for meeting the 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) / Southern Grid; situated within the State of Tamil Nadu, micro-sited in many locations⁷ based on wind availability.

This wind based electricity generation aggregates to a total Installed capacity of 460.18 MW and the generation is expected to be approximately 804 GWh, per annum.

The project activity consists of many sub projects with different ownerships, all of which are Members of Tamil Nadu Spinning Mills Association. This Association, TASMA has already promoted⁴ and is continuing to promote among its members adoption of Wind energy generation to meet their own needs or export to grid and has demonstrated to them that the wind energy generation is a viable option keeping in mind the CDM revenue. TASMA has also been authorised⁸ by its members i.e. the sub project owners of the present project activity, to develop the wind energy generation activities as CDM project. Hence these sub projects have been bundled into a bundled CDM project activity. The list consisting of details of the sub-project activity is given in Appendix -3.

The project activity generates approximately 804 GWh of power, using wind energy through wind turbine technology, enabling displacement of Grid energy of that quantum and also contributes to delaying the addition to the capacity of new conventional power plants.

The energy generated by the project activity is consumed by the promoters at their mills by way of Energy Wheeling Agreements⁹ or sold to TNEB under Energy Purchase Agreements¹⁰ (earlier it was by a

⁵ Minutes of General Body Meeting held on 07/11/2005

⁶ Based on advice of industry expert and consultant

⁷ Details available in Appendix 3

⁸ Authorization letter by Wind Turbine generator owners

⁹ Energy Wheeling Agreement

¹⁰ Energy Purchase Agreement



single power purchase agreement¹¹) executed between individual owners and the TNEB. The owners of sub projects, wheel the power to their mills, located at distances using the Tamil Nadu Electricity Grid through wheeling arrangements. All the windmill systems have been commissioned.

Sub Project Selection for TASMA II bundle

TASMA has issued a note¹² to all its members, providing the parameters to evaluate the investment decision in wind turbines. This note was based on the past experience of TASMA in promoting and implementation of TASMA I, manufacturers' assurance/ guarantee, reports of Indian Wind Directory, TNEB's Book of Statistics at a Glance and the TNERC's Tariff order. The above said note detailed, Plant Load Factor, turbine costs of different capacities, land & land development costs, debt equity ratio, cost on interest, levies and taxes and such other items. In early 2004, TASMA hired an investment consultant to prepare an investment guideline¹³ for its members to take investment decisions on wind. The investment guidelines has been submitted by consultant in December 2004 and it has been circulated to all members of TASMA.

TASMA since 2001 has been conducting periodical meetings to disseminate the knowledge and experience of CDM and encourage the members to invest in Clean Energy. TASMA members were briefed about the decision to bundle TASMA II on 07/11/2005. TASMA also shared the CDM process experience of TASMA I among the members. To evaluate the potential WTG's for TASMA II, a committee was setup to scrutinize¹⁴ the information submitted by its members to assess the requirements as stipulated by UNFCCC for Clean Development Mechanism. On positive recommendation by the committee, the WTGs were included for TASMA II bundle.

Contribution to Sustainable Development

The Significant Contributions by the project activity towards sustainable development are described in detail in Appendix 1. Some of the contributions are highlighted below:

- Use of renewable energy (Wind) for generation of power
- Reduction in emission of Green House Gases
- Increase the contribution of renewable energy to Southern Grid/Tamil Nadu Electricity Grid of India.
- Encourage Industries to contribute to Green Power Development and CDM
- Reduction in procurement and use of diesel based power generation sets as power option by project participants
- Overall Rural infrastructure development
- Capacity addition to the installed capacity of Southern Grid, filling up the ever-growing gap between power supply and demand
- Generation of additional employment especially for windmill operations/ maintenance/security etc.

¹¹ Power Purchase Agreement

¹² Investment guidelines of TASMA minuted on 23-08-2003

¹³ Copy of guidelines has been provided to DOE

¹⁴ Minutes of meeting of General meeting of CDM members dated 21/12/2005



- 2% of the CDM revenue will be used for Old Age Home for member mill workers and for Public convenience systems in selected villages.

A.3. Project participants:

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The Tamil Nadu Spinning Mills Association (TASMA) is the Primary Project Proponent. The owners of the wind turbines included in this bundle have authorised TASMA to represent them in the CDM process.

TASMA (a non- profit organisation) is a registered society registered under the Tamil Nadu Societies Registration Act 1975. Rules and Regulations therein govern its functioning. TASMA was incorporated in the year 1997, with a small group of 36 spinning mills from Dindigul District of Tamil Nadu, with the purpose of catering to multifarious business needs of spinning mills under a common platform. Today, the Association has grown to strength of more than 400 mills having effective interfaces with Government, Business Houses, NGOs, and Overseas Bodies. The Association specifically interacts with organizations like Tamil Nadu Pollution Control Board, Tamil Nadu Electricity Board (TNEB), Labour Department, Export / Import, Textile Commissionerate, Ministry of Industries and Commerce etc and areas like Service Tax, Central Excise & Customs, VAT, Income Tax etc are being taken care.

TASMA promotes best practices among its members which includes green practices such as wind based electricity generation and energy efficiency. Thus, TASMA has brought together the mills for establishing wind energy generation keeping in mind the potential of CDM benefits. The promotion activity has been enabled through various meetings and presentations organised with the help of WTG manufacturers. Subsequently, TASMA has been authorised by its members to act as the aggregator of the sub-projects of the CDM-Project activity and to represent the owners during the CDM project development such as validation, monitoring, verification, contracting and subsequent issuance related areas.

The list of project participants is:

Name of the Party involved (*) (host)indicates a host party)	Private and/or public entity (ies) Project Participants (*) (as applicable)	Kindly indicate if the party involved wishes to be considered as project participant (Yes/NO)
Government of India (Host Party)	Tamil Nadu Spinning Mills Association – (TASMA)	No
(*)In accordance with the CDM modalities and procedures, at the time of making the CDM-PDD public at the stage of validation, a Party involved may or may not have provided its approval. At the time of requesting registration, the approval by the party (ies) involved is required.		

The details of sub projects are given in Appendix – 3

**A.4. Technical description of the project activity:****A.4.1. Location of the project activity:**

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A.4.1.1. Host Party (ies):

>> The Host party is the Government of India (GOI)

A.4.1.2. Region/State/Province etc.:

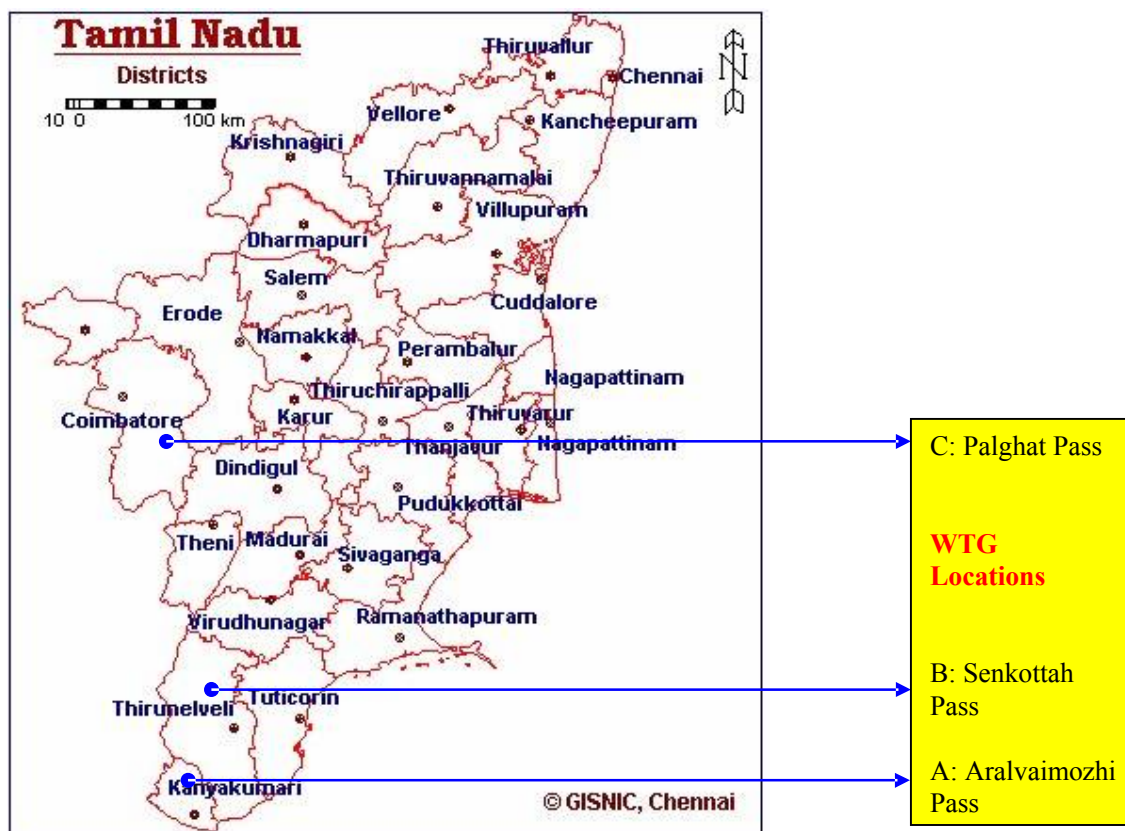
>> Tamil Nadu

A.4.1.3. City/Town/Community etc.:

>> Aralvaimozhi, Senkottah and Palghat passes of Tamil Nadu

A.4.1.4. Details of physical location, including information allowing the unique identification of this project activity (maximum one page):

>>The WTGs are installed in major locations at Aralvaimozhi, Senkottah and Palghat passes in the districts of Kanyakumari, Tirunelveli and Coimbatore respectively. The sites in these locations have been selected through the micro-sitting studies and data analysis on wind availability, speed of wind, minimum speed etc. All WTGs belonging to the project activities are connected to the same grid namely TNEB, which is part of the southern grid of India. The map showing the locations of WTGs is as follows:



The details of the locations of the WTGs, with HT service connection numbers (for unique identification of location) are shown in Appendix –3.

A.4.2. Category (ies) of project activity:

>> The category of the CDM project activity would be –“Grid connected electricity generation from renewable sources”

Scope: Scope No 1, Sectoral Scope – Energy Industry

A.4.3. Technology to be employed by the project activity:

>>

Technology:

Wind energy generation is a clean technology for production of electricity, with no emission of Green House Gases.

The project activity has employed Horizontal Axis WTGs of different capacities.

All the WTGs deployed in the project activity are from well-known international manufacturers. All these machines are type tested and approved by the Ministry of New and Renewable Energy (MNRE), Government of India.



The Technical Components of WTG are as follows:

- Main Tower - Metallic tower of height ranging from 45 m to 80 m
- Nacelle - Houses, Main shaft, Gearbox and Generator
- Main shaft - Rotated by the Blade connected to gearbox/generator
- Gearbox - To step up Generator RPM (not used in some models)
- Generator - Induction Type generators
- Blade - Fibre blades to take off at wind speeds from 4 m /sec to 2.5 m /sec
- Hub - Connects, the blade and main shaft and houses the brakes

A unit system of WTG, consisting of the above subsystems works in conduction with, LT line and HT line. The turbine generates power at 400 volts, which is stepped up to 33 KV by the local transformers. The HT transmissions are connected to service 110 KV/230 KV substations provided by TNEB

The plant load factor of WTG is affected by Wind availability, Wind speed, Grid Availability and the Machine Availability. The available locations for the turbines in this project activity do not have very good wind availability as such locations are already occupied and the grid availability is also not very good as evacuation infrastructure is inadequate at the time of investment decision. The plant load factor of the WTGs on the basis of size and passes in Tamilnadu is attached as a table in Appendix 4.

The choice of capacity of the WTG was based on,

- The present and future power requirements of the mill owners.
- The Availability, lead time and cost of WTGs with the suppliers
- Wind Characteristics and the locations

The Sub Projects covered by this project activity involves the installation of 812 WTGs with the following capacity distribution.

Table: 1

Capacity Wise Details			
SL. NO	CAPACITY (KW)	NO.OF MACHINES	TOTAL CAPACITY (MW)
1	225	196	44.10
2	230	5	1.15
3	250	145	36.25
4	330	11	3.63
5	350	46	16.1
6	500	97	48.5
7	600	54	32.4
8	750	78	58.5
9	800	20	16
10	850	15	12.75



11	1250	120	150.0
12	1500	3	4.5
13	1650	22	36.3
	TOTAL	812	460.18

The sub projects covered by this project activity involves the following makes of WTGs

Table: 2

MAKE WISE DETAILS				
SL. NO	MAKE	CAPACITY (KW)	NO.OF MACHINES	TOTAL CAPACITY (MW)
1	NEPC	225	135	30.375
2	SWFL	225	48	10.80
3	VESTAS RRB	225	13	2.925
4	ENERCON	230	5	1.15
5	CWEL	250	16	4.00
6	PIONEER WINCON	250	108	27.00
7	SRIRAM EPC LTD	250	21	5.25
8	ENERCON	330	11	3.63
9	SUZLON	350	46	16.10
10	VESTAS RRB	500	97	48.50
11	ENERCON	600	18	10.80
12	SUZLON	600	4	2.40
13	VESTAS RRB	600	32	19.20
14	NEG MICON/VESTAS	750	68	51.00
15	NEPC	750	2	1.50
16	VESTAS	750	8	6.00
17	ENERCON	800	20	16.00
18	PIONEER ASIA WIND TURBINES	850	15	12.75
19	SUZLON	1250	120	150.00
20	SUZLON	1500	3	4.50
21	NEG MICON/VESTAS	1650	20	33.00
22	VESTAS	1650	2	3.30
	TOTAL		812	460.18

**A.4.4 Estimated amount of emission reductions over the chosen crediting period:**

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The estimated amount of emission reduction from the project activity, over the 10 year fixed crediting period is: 7440310 tCO₂. This is for the crediting period of 10 years as shown below:

Years	Annual Estimation of emission reductions in tonnes of CO ₂ e
2009-10	744031
2010-11	744031
2011-12	744031
2012-13	744031
2013-14	744031
2014-15	744031
2015-16	744031
2016-17	744031
2017-18	744031
2018-19	744031
Total estimated reductions (tonnes of CO₂e)	7440310
Total number of crediting years	10 Years
Annual average over the crediting period of estimated reductions (tonnes of CO₂e)	744031

A.4.5. Public funding of the project activity:

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The entire funding for the project activity has come from the funds of the individual sub project owners and commercial loans availed by them from banks and financial institutions. No Official Development Assistance (ODA) has been used for the project.

**SECTION B. Application of a baseline and monitoring methodology****B.1. Title and reference of the approved baseline and monitoring methodology applied to the project activity:**

>>

Title: Consolidated Baseline Methodology for grid connected electricity generation from renewable sources

Reference: ACM0002 Version 9, EB 45

This methodology also refers to the latest approved versions of the following tools:

- Tool to calculate the emission factor for an electricity system; version 01.1, EB 35
- Tool for the demonstration and assessment of additionality; version 05.2 EB 39.

B.2 Justification of the choice of the methodology and why it is applicable to the project activity:

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Below we quote passages from the ACM0002 Version 9, EB 45 and justify the applicability of this methodology to the project activity:

This methodology is applicable to grid-connected renewable power generation project activities under the following conditions:

The project activity is the installation or modification/retrofit of a power plant/unit of one of the following types: hydro power plant/unit (either with a run-of-river reservoir or an accumulation reservoir), wind power plant/unit, geothermal power plant/unit, solar power plant/unit, wave power plant/unit or tidal power plant/unit;

This project activity involves grid connected renewable power generation involving installation of wind power units and hence satisfies the applicability condition cited above.

The geographic and system boundaries for the relevant electricity grid can be clearly identified and information on the characteristics of the grid is available.

The geographic and system boundaries of the TNEB grid and Southern Grid are clearly identified and widely used by Electricity Administrative and Regulatory Authorities in India. The information on the characteristics of the grid is publicly available from the Central Electricity Authority. Hence this project activity satisfies the applicability condition cited above.

The methodology is not applicable to the following:

- Project activities that involve switching from fossil fuels to renewable energy sources at the site of the project activity, since in this case the baseline may be the continued use of fossil fuels at the site;
- Biomass fired power plants;
- Hydro power plants³ that result in new reservoirs or in the increase in existing reservoirs where the

power density of the power plant is less than 4 W/m².

;

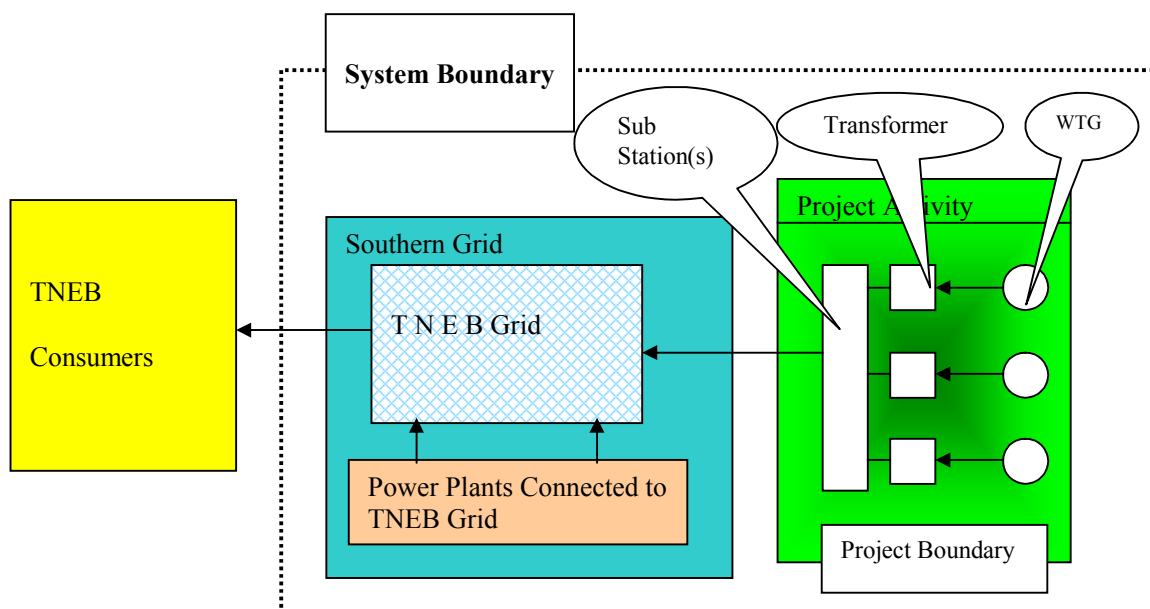
This project activity does not involve (i) switching from fossil fuels to renewable energy (ii) Biomass fired plant (iii) Hydro power plant and hence satisfies the applicability condition cited above.

B.3. Description of the sources and gases included in the project boundary

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The spatial extent of the project boundary comprises of all the power plants connected to the southern grid of India.

The schematic diagram of project boundary is as follows:



The sources and gases included in the project boundary are as follows:

	Source	Gas	Included?	Justification / Explanation
Base Line	Emissions from the power plants connected to the southern grid of India	CO ₂	Yes	Main source of emission
		CH ₄	No	Not considered. This is conservative
		N ₂ O	No	Not considered. This is conservative



Project Activity		CO ₂	No	As per ACM0002 , project emission is not to be considered for a wind project
		CH ₄	No	As per ACM0002 , project emission is not to be considered for a wind project
		N ₂ O	No	As per ACM0002 , project emission is not to be considered for a wind project

B.4. Description of how the baseline scenario is identified and description of the identified baseline scenario:

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As per ACM 0002,

Identification of the baseline scenario

If the project activity is the installation of a new grid-connected renewable power plant/unit, the baseline scenario is the following:

Electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations described in the “Tool to calculate the emission factor for an electricity system”.

Baseline scenario description

The Indian electricity system is divided into two grids, the new Integrated Northern, Eastern, Western and North Eastern Grids (NEWNE) and the Southern Grid. Each grid covers several States. As the grids are interconnected, there is inter-state and inter- regional exchange. A small power exchange also takes place with the neighboring countries Bhutan and Nepal.

For the purpose of calculating the emission reductions achieved by any CDM project, the CDM Executive Board requires that the “project electricity system is defined by the spatial extent of the power plants that can be dispatched without significant transmission constraints”. This implies that the grid emission factors are most appropriately calculated at the level of the regional grids. As the project activity is in Tamil Nadu which is under the Southern region, the Southern regional grid is the appropriate project electricity system.

B.5. Description of how the anthropogenic emissions of GHG by sources are reduced below those that would have occurred in the absence of the registered CDM project activity (assessment and demonstration of additionality):

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As the power requirement from the southern States of India, is steadily increasing, in the absence of the project activity, the same amount of power as generated by the project activity would have been generated by southern grid
or



by installing a common captive power plant of the order of 832¹⁵ GWh from any viable source for the members of TASMA .

Demonstrating the additionality of the project

As per 17/CP.7, a project will be defined additional if the anthropogenic GHG emissions from the source are reduced below that would have occurred in the absence of the registered project activity

Within the scope of the adopted baseline methodology, the additionality of the project activity has been demonstrated and assessed using the latest version of the “Tool for the demonstration and assessment of additionality – Version 5.2 ” agreed by the CDM Executive Board.

Step 1. Identification of alternatives to the project activity consistent with current laws and regulations*Requirement***Sub-Step 1a: Define alternatives to the project activity.**

1. Identify realistic and credible alternative(s) available to the project participants or similar project Developers that provide outputs or services comparable with the proposed CDM project activity.

These alternatives are to include:

- *The proposed project activity undertaken without being registered as a CDM project activity;*
- *Other realistic and credible alternative scenario(s) to the proposed CDM project activity scenario that deliver outputs and on services (e.g. electricity, heat or cement) with comparable quality, properties and application areas, taking into account, where relevant, examples of scenarios identified in the underlying methodology;*

• If applicable, continuation of the current situation (no project activity or other alternatives undertaken). If the proposed CDM project activity includes several different facilities, technologies, outputs or services, alternative scenarios for each of them should be identified separately. Realistic combinations of these should be considered as possible alternative scenarios to the proposed project activity.

For the purpose of identifying relevant alternative scenarios, the project participant should include the technologies or practices that provide outputs (e.g. cement) or services (e.g. electricity, heat) with comparable quality, properties and application areas as the proposed CDM project activity and that have been implemented previously or are currently being introduced in the relevant country/region.

¹⁵ Equivalent to the output of 475MW wind energy based power plant with 20% PLF.



The realistic and credible alternatives to the project activity will be as follows:

Table: 4

	Alternatives	Comments
a	Proposed Project activity – 460 MW Wind Energy based power generation not undertaken as a CDM activity	The power could have been generated by installing WTG of various capacities, from 225 KW to 1650 KW, in various Wind zones in the State to meet the power requirements of the Industrial facilities of TASMA members. Hence it can be concluded that this can be a realistic and plausible alternative.
b	To allow the members of TASMA – The industrial consumers - to continue drawing power from the southern grid, that is without investing in the project activity.	The Power could also be sourced from the grid to meet the requirements of the Industrial facilities of TASMA members. Hence this can be included as a plausible alternative.
c	TASMA to set up a 120 MW Coal based power plant for its member and wheeling the power generated through TNEB grid.	TASMA has the flexibility of commissioning and operating a coal based power plant at any/different location in Tamil Nadu. The electricity generated from the power plant can be wheeled to all the members of the association through the TNEB grid. Hence this can be included as a plausible alternative.
d	TASMA to set up a 120 MW biomass based power plant for its member and wheeling the power generated through TNEB grid.	This cannot be a realistic and plausible alternative, as managing biomass (supply chain/reliable fuel source) as a fuel for such a large scale project is a difficult task. Also there exists a risk of availability of biomass in such a large magnitude in the future. The table attached in appendix 5 shows the installation of biomass based power plant during 2002 -2005 in Tamilnadu. It can be inferred from the table that the maximum capacity of biomass power plant installed during these years 2002-2005 is only 34 MW. So the installation of 120 MW capacity of biomass fired power plant is subject to very high risk of non availability of biomass in the region. Also it requires very large land area to store the biomass for the sustainable operation through out the year, which requires large capital. So the biomass based power plant is also not a feasible option. Hence it can be concluded that biomass fired power plant is not a realistic alternative and cannot be



		included as a plausible alternative.
e	TASMA to set up a fossil fuel (liquid/natural gas) based power plant of suitable capacity (equivalent) to the project activity for its member and wheeling the power generated through TNEB grid.	The various fossil fuel that can be utilized for power generation are as below : 1. Natural gas/LNG based power generation. This cannot be a realistic and plausible alternative as there is no natural gas infrastructure/ availability¹⁶ in the State of Tamil Nadu at the time of conceptualization of the project activity. Although companies like GAIL and Petronet LNG had plans to set up a re-gasification terminal in the State it was not expected to be operational before 2009¹⁷. 2. HSD based power generation Diesel based captive power generation is a common practice in the textile industry. However HSD based power generation at such a large scale is not a common practice in the State. This can be substantiated from the fact that out of the 37 power plants in Tamil Nadu, there is only one Diesel based power plant which is running at less than 50% Plant Load Factor (PLF)¹⁸. Hence it can be concluded that HSD based power generation is not a realistic and plausible alternative.
f	TASMA to set up a hydro based power plant ¹⁹ of 200 MW capacity (equivalent) to the project activity for its member and wheeling the power generated through TNEB grid.	As per the study done for assessing the hydro power potential in different States of India, Tamil Nadu had a very low untapped potential of hydro power, 130 MW approximately²⁰. Also there has been no private sector investment in hydro power project in the State²¹. Hence it can be concluded that hydro based power generation is not a realistic and plausible alternative.
g	TASMA to set up a solar based power plant of suitable capacity (equivalent) to	The quantum of grid connected solar system in Tamil Nadu at the time of conceptualization of the project

¹⁶ <http://www.thehindubusinessline.com/2005/04/18/stories/2005041801731300.htm>

¹⁷ <http://www.thehindubusinessline.com/2005/12/30/stories/2005123003380300.htm> and http://gail.nic.in/gailnewsite/mediacenter/mediacenter_pressrelease111.html

¹⁸ <http://www.cea.nic.in/planning/c%20and%20e/Government%20of%20India%20website.htm>

¹⁹ A Hydro power plant of 200 MW capacity would provide the same quantum and quality of services as that of project activity.

²⁰ <http://www.cea.nic.in/hydro/Status%20of%20Hydroelectric%20Potential%20Development.pdf>

²¹ <http://www.cea.nic.in/planning/c%20and%20e/Government%20of%20India%20website.htm>



	the project activity for its member and wheeling the power generated through TNEB grid.	activity was only 0.165 MW and that of India was 47 MW ²² . The capital cost required for installing a solar generating station is 30 times more than that of the conventional generating station ²³ . Hence from the above points it can be concluded that this is not a realistic and plausible alternative.
h	Combination of alternatives b and c listed above.	From the above discussion only alternative b and c are plausible alternatives. Hence a combination of alternative b and c is also a realistic and plausible alternative.

Outcome of step 1a

As discussed above, the list of realistic and credible alternatives will be as follows:

- a. Proposed Project activity – 460 MW Wind Energy based power generation not undertaken as a CDM activity.
- b. To allow the members of TASMA – The industrial consumers - to continue drawing power from the southern grid, that is without investing in the project activity.
- c. TASMA to set up a 120 MW Coal based power plant for its member and wheeling the power generated through TNEB grid
- h. Combination of alternatives b and c listed above.

Sub- Step 1b: Enforcement of applicable laws and regulations.

2. The alternative(s) shall be in compliance with all mandatory applicable legal and regulatory requirements, even if these laws and regulations have objectives other than GHG reductions, e.g. to mitigate local air pollution. (This sub-step does not consider national and local policies that do not have legally-binding status.).

3. If an alternative does not comply with all mandatory applicable legislation and regulations, then show that, based on an examination of current practice in the country or region in which the law or regulation applies, those applicable legal or regulatory requirements are systematically not enforced and that noncompliance with those requirements is widespread in the country. If this cannot be shown, then eliminate the alternative from further consideration;

4. If the proposed project activity is the only alternative amongst the ones considered by the project participants that is in compliance with mandatory regulations with which there is general compliance, then the proposed CDM project activity is not additional.

The list of alternatives described in sub step 1a is in compliance with all mandatory applicable legal and regulatory requirements. Hence the proposed project activity is not the only alternative that is in compliance with all mandatory applicable legal and regulatory requirements.

²² Draft Discussion Paper on “Tariff Related Issues for Non Conventional Energy” Sources by TNERC

²³ Draft Discussion Paper on “Tariff Related Issues for Non Conventional Energy” Sources by TNERC



The project activity has crossed sub-step 1 of additionality demonstration, and hence this assessment has moved to the next step 2 investment analysis or step 3 barrier analysis.

Step 2. Investment analysis

Sub-step 2a. Determine appropriate analysis method

Option 1 as per Tool for the demonstration and assessment of additionality is Simple Cost Analysis. It is applicable when CDM project activity produces no economic benefits other than CDM related income.

Option I, use of simple cost analysis, is not applicable as the project activity generates and uses the power generated for its own plant requirement and derives economic benefits.

TASMA proposes to use **Option II – Investment Comparison analysis** as it derives economic benefits from the project activity by generation and use of electricity.

Sub-step 2b: Option II. Apply investment comparison analysis

Financial indicators like IRR/DSCR/NPV are not applicable as the primary objective of TASMA is to generate power that is reliable to run the textile and allied businesses of its members i.e. the investment is to gain low cost access to reliable power to run the members textile operations and not to achieve higher return on investment by entering into new power generation business.

Hence the levelized cost of electricity generation (INR/kWh) is the most suitable financial indicator in this decision making context.

Sub-step 2c: Calculation and comparison of financial indicators (only applicable to Options II and III):

Assumption for coal based power generation

Table: 5

Parameter		Unit	References
Installed Capacity	120	MW	
Capital Cost per MW	40	Million INR/MW	Report of Expert Committee on Fuels for power generation.
Total Investment	4800	Million INR	
Debt: Equity	70:30	-	Central Electricity Regulatory Commission order ²⁴ - Determination of terms and conditions of tariff applicable from 1.4.2004
Return on Equity	16	Percentage	Draft Discussion Paper on “Tariff Related Issues“ for Non Conventional Energy Sources by TNERC

²⁴ <http://www.cercind.gov.in/08022007/Final-Order-Terms.pdf>



O&M Costs including insurance charges	2.5%	Percentage of the capital Cost	http://www.cercind.gov.in/2612/Order%20Final.pdf , page 92
Plant Load Factor	80	Percentage	Central Electricity Regulatory Commission order - Determination of terms and conditions of tariff applicable from 1.4.2004 , page 14
Auxiliary Consumption	9.5	Percentage	Central Electricity Regulatory Commission order - Determination of terms and conditions of tariff applicable from 1.4.2004
Gross Calorific Value of Coal	3750	Kcal/kg	Report of Expert Committee on Fuels for power generation.
Station Heat Rate	2500	Kcal/ kwh	Central Electricity Regulatory Commission order - Determination of terms and conditions of tariff applicable from 1.4.2004
Cost of Coal	790	INR/tonne	Report of Expert Committee ²⁵ on Fuels for power generation.
Wheeling Charges	15	Percentage	Captive Power Plant Policy of Government of Tamil Nadu
Generation tax	0.10	INR/kwh	The Tamil Nadu Tax on Consumption or Sale of Electricity Act 2003
Discount factor	11.5%		Prime Lending Rate during 2004 ²⁶
Book Depreciation Rate (Straight Line Method [SLM] basis)			
Civil Works	4.5%	Percentage	
Plant and Machinery	4.5%	Percentage	
Book Depreciation up to (% of asset value)	90	Percentage	
Working capital			
Spares	1% of Capital Cost	Percentage	Central Electricity Regulatory Commission order - Determination of terms and conditions of tariff applicable

25

http://cea.nic.in/thermal/Special_reports/Report%20of%20the%20expert%20committee%20on%20fuels%20for%20power%20generation.pdf

²⁶ Evidence has been provided to DOE



			from 1.4.2004
Working capital interest rate	11.5%	Percentage	Prime Lending Rate during 2004 ²⁷

The levelized cost of electricity generation using Coal as the energy source calculated using the above values comes out to be 2.258 INR/kWh.

The average unit cost of generation of thermal power station in Tamilnadu in year 2000-01²⁸ and 2001-02²⁹ are Rs 1.87 and Rs 1.98. So the evaluated cost of generation of coal based power plant (i.e. Rs 2.258/KWh) is a very conservative estimate.

Assumption for wind based power generation

TASMA has experience due to its interaction with many of its members invested in WTGs earlier and with manufacturers. The investment analysis has been done considering the past experience of TASMA. In August 2003, TASMA had decided to appoint an investment consultant to make the investment analysis on wind mill and prepare a suitable investment guideline to the intended investors on WTGs, who are the members of TASMA. For the time being, till the investment guideline comes in to effect, TASMA had suggested³⁰ the members that they might take investment decisions based on the guidelines provided by TASMA which was again based on the reports of Indian Wind Directory, TNEB's Book of Statistics at a Glance and the TNERC's Tariff order dated 16.03.2003. The financial indicator namely levelized cost of generation (INR/kwh) has been calculated by considering all the relevant costs (including, the investment cost and the operation and maintenance cost) and revenues (excluding CER revenues, but including subsidies/fiscal incentives where applicable).

The following table illustrates the parameters used for the investment analysis for each size of WTG installed in 2003 and 2004.

Table 6

Parameter		Unit	References
Installed Capacity	All Sizes	MW	
Capital cost per MW	45	Million INR/MW	Investment guidelines for TASMA members - TASMA minutes of meeting ³¹
Debt: Equity	70:30	-	Same as above
Return on Equity	16	Percentage	Draft Discussion Paper on "Tariff Related Issues for Non

²⁷ Evidence has been provided to DOE

²⁸ The evidence has been provided to DOE

²⁹ The evidence has been provided to DOE

³⁰ Minutes of meeting dated 23/08/2003 has been submitted to DOE

³¹ Minutes of meeting dated 23/08/2003 has been submitted to DOE



			Conventional Energy Sources” by TNERC
O&M Costs	1.25	Percentage	Investment guidelines for TASMA members - MoM dated 23/08/2003
Plant Load Factor	15	Percentage	Same as Above
Banking charges	5%	of energy banked	Same as Above
Wheeling Charges	5	Percentage	Same as above
Book Depreciation Rate (Straight Line Method [SLM] basis)			
Civil Works	4.5	Percentage	Draft Discussion Paper on “Tariff Related Issues for Non Conventional Energy Sources” by TNERC
Plant and Machinery	4.5	Percentage	
Book Depreciation up to (% of asset value)	90	Percentage	

Later on in 2004, the Financial Consultant has been appointed and in December 2004, the appointed Financial Consultant has submitted the report on Investment guideline for the members of TASMA investing on WTGs. The report proposed the size wise cost of WTGs considering the past variation in the price trends of WTGs. The report also proposed the Pass wise PLF for each WTGs Size.

The following table illustrates the parameters used for the investment analysis for each size of WTGs from 2005 onwards.

Table: 7

Parameter		Unit	References
Installed Capacity	All sizes	MW	
Capital cost per MW		Crore INR/MW	Investment guidelines from Financial consultant. The Size wise Project cost is attached in Appendix 5
Debt: Equity	70:30	-	Investment guidelines from Financial consultant
Return on Equity	16	Percentage	Investment guidelines from Financial consultant
O&M Costs	1.25	Percentage	Investment guidelines from Financial consultant
Plant Load Factor	19.94	Percentage	It has been arrived on the basis of weighted average considering Investment guidelines from Financial consultant. The pass wise PLF are provided in Appendix 5
Banking charges	5%	of energy banked	Investment guidelines from Financial consultant



Wheeling Charges	5	Percentage	Investment guidelines from Financial consultant
Book Depreciation Rate (Straight Line Method [SLM] basis)			
Civil Works	4.5	Percentage	Draft Discussion Paper on “Tariff Related Issues for Non Conventional Energy Sources” by TNERC
Plant and Machinery	4.5	Percentage	
Book Depreciation up to (% of asset value)	90	Percentage	

The evaluation of various alternatives as discussed in table 4 is discussed below in table 8 based on the assumptions described above.

Table: 8

Sr. No	Alternative	Cost/MW (INR million)	Unit cost of generation (INR/kwh)	Conclusion
a.	Proposed Project activity – 460 MW Wind Energy based power generation with various capacity/location combinations.	45 to 71.70	2.99 – 5.58	As compared to other option wind energy based renewable energy generation from any capacity mix require higher capital investment and the unit cost of generation is also high. However the provision to avail of banking facilities by which the power generated during a few months can be used throughout the financial year on payment of additional charges at 5% to Tamil Nadu Electricity Board. But the generated units could be lapse at the end of financial year (if banked). Also the wind energy based electricity generation is seasonal and infirm. Hence from the above it can be seen that wind energy based power generation is not the most financially attractive option.



b.	To allow the members of TASMA – The industrial consumers - to continue drawing power from the southern grid, that is without investing in the project activity.	-	3.68 ³²	Although this alternative doesn't not require any capital investment, it cannot be considered as a financially attractive option for the reasons mentioned below: • The base electricity purchase rate of INR 3.68 per kwh with 20% additional cost during peak hours (6 hrs in a day) is much higher when compared to captive based power generation cost. • Also the industrial consumers has to accept restriction and control measures if any power shortage is there.³³. Hence the option of considering import of electricity from grid alone is not a financially attractive option due to unreliable power supply and higher cost of power.
c.	TASMA to set up a Coal based power plant of suitable capacity (equivalent) to the project activity for its member and wheeling the power generated through TNEB grid.	40	2.258	This alternative is a financially attractive alternative due to – Low cost of electricity generation. – No uncertainty in fuel availability. – Provides firm power
h.	Combination of alternatives b and c as described above			From the above discussion it can be concluded that a combination of alternative b and c is not the most financially attractive alternative.

Thus, the most financially attractive alternative as identified by the investment analysis using the levelized cost of electricity generation (in INR/ kWh) as the financial indicator is alternative (c) which is TASMA setting up a Coal based power plant of suitable capacity (equivalent) to the project activity for its member and wheeling the power generated through TNEB grid.

³² Actual Electricity Bills of TASMA members during 2003-2004. The bills has been submitted to DOE

³³ Regulation 38 of Tamil Nadu Electricity Distribution Code 2004



To check the robustness of the additionality argument discussed above the analysis is further worked out for all the WTG's of the bundle considering the scenario under which each individual investment decision was made i.e. the actual costs incurred for setting up the WTG (including subsidies/fiscal incentives where applicable). The table below summarizes the levelized cost of electricity generation for individual WTG on the basis of actuals.

Table: 9

Sr. No.	Scenario		Levelized Cost of generation (INR/kWh)
(a)	Levelized cost of generation if the project activity is implemented without the CDM revenue	Min	2.5
		Average	4.6
		Max	6.7
(b)	Levelized cost of generation if the power is generated by using coal as the energy source		2.258

From the above table it can be seen that the cost of generation for every individual investment decision is higher than coal based power generation. It is important to note that TASMA had an option of installing a new coal based captive power plant to meet the power requirement of its members. However considering the CDM revenue the association promoted Wind energy based power generation among its members and also provided all the necessary guidance as required by the members.

Sub-step 2d. Sensitivity analysis (only applicable to options II and III):

To substantiate the robustness of the results obtained above the sensitivity analysis has been conducted. As per guideline provided by EB in meeting no. 41 annex 45 the criteria for choosing the sensitivity analysis parameter is:

Guidance: Only variables, including the initial investment cost, that constitute more than 20% of either total project costs or total project revenues should be subjected to reasonable variation (all parameters varied need not necessarily be subjected to both negative and positive variations of the same magnitude), and the results of this variation should be presented in the PDD and be reproducible in the associated spreadsheets

Since the probability of variation in PLF is more as it is dependent on many variables like grid availability, wind speed, breakdown / shutdowns etc. it has been chosen as the parameter for variation which can directly affect the revenue.

Similarly the parameters which can affect 20% of the total cost for this case is only the investment cost. Since the investment costs were considered on the final negotiated values (later the value remained same



in the purchase orders also)³⁴ there were no possibilities of this cost getting reduced. Hence the sensitivity analysis would have to be performed only for an increase in capital cost which would result in decreasing project IRR further and make CDM revenue all the more important to make project happen. Hence this analysis is not presented in the PDD.

Thus PLF was the only parameter which required to be checked for sensitivity analysis.

The sensitivity analysis has been conducted for all the WTG by varying the PLF by $\pm 10\%$. The results of the sensitivity analysis for all the WTG's is shown in the table below:

Table 10: Sensitivity analysis

Sr. No.	Scenario			Levelized Cost of generation (INR/ kWh)
1	Levelized cost of generation if the project activity is implemented without the CDM	+ 10% PLF	Min	2.72
			Average	3.65
			Max	5.08
2	Levelized cost of generation if the power is generated by using coal as the energy source	+10% PLF		2.146

Sr. No.	Scenario			Levelized Cost of generation (INR/ kWh)
1	Levelized cost of generation if the project activity is implemented without the CDM	- 10% PLF	Min	3.3
			Average	4.75
			Max	6.19
2	Levelized cost of generation if the power is generated by using coal as the energy source	- 10% PLF		2.39

Conclusion

From the above discussion, it can be seen that under any given scenario the levelized cost of generation of individual WTG is more than that of coal based power plant.

The sub projects in this project activity, without CDM revenue, are not financially attractive.

Steps 2a, 2b, 2c are passed satisfactorily. Proceed to step 4

³⁴ It has been verified by DOE during site visit



Step 4.
Common practice analysis

Requirement

Sub-step 4a. Analyze other activities similar to the proposed project activity:

1. Provide an analysis of any other activities implemented previously or currently underway those are similar to the proposed project activity. Projects are considered similar if they are in the same country/region and/or rely on a broadly similar technology, are of a similar scale and take place in comparable environment with respect to regulatory framework, investment climate, access to technology, access to financing, etc. Other CDM project activities are not to be included in this analysis. Provide documented evidence and where relevant, quantitative information. On the basis of that analysis, describe whether and to which extent similar activities have already diffused in the relevant region.

Sub-step 4b. Discuss any similar options that are occurring:

Outcome of step 4

- a. Analyse other activities similar to the project activity and**
- b. Discuss Similar Options that are Occurring**

In India only 10 States have wind power generation, in which Tamil Nadu has maximum share. Tamil Nadu has 2894 MW of installed capacity, as on 31/03/2006.

The following table shows the installation of WTG project in Tamil Nadu, from the year 1992-93 to 2005-06

Table 11

State : Tamil Nadu		
Year	Capacity – MW	Cumulative Capacity – MW
Up to March 1992	22.31	22.31
1992-93	11.07	33.38
1993-94	50.465	83.845
1994-95	190.865	274.71
1995-96	281.68	556.39
1996-97	119.765	676.155
1997-98	31.14	707.295
1998-99	17.765	725.06
1999-00	45.675	770.735
2000-01	41.9	812.635
2001-02	44.9	857.535
2002-03	132.8	990.335
2003-04	371.3	1361.635
2004-05	675.4	2037.035
2005-06	857.6	2894.635



Source: <http://www.windpowerindia.com/statyear.html>

The above scenario of wind mill installation in Tamil Nadu is characterised by two distinguishable regimes, based on policies and business environment.

Regime A: Pre 2001-2002 where the government policies and business parameters such as cost structure per mega watt was more favourable

Regime B: After 2001-2002 – where the government policies were not as favourable and business parameters such as cost structure per mega watt was less favourable

The significant differences in Regime B in terms of policy and investment climate are outlined below:

- The Tariff was changed from INR.2.25/KWh with proposed 5% escalation each year, to fixed INR.2.70/KWh by an order dated 27.09.2001 by Tamil Nadu Electricity Board.
- The wheeling and Banking charges have been increased from 2% to 5% by an order dated 27.09.2001 by Tamil Nadu Electricity Board.
- The Electricity Generation per MW capacity has started decreasing due to overcrowding of WTGs putting pressure beyond the available capacity of evacuation infrastructure.

So the projects falling in Regime A cannot be considered as similar projects to TASMA project activity as the circumstances based on policy and business parameters are different.

So the projects in the Regime B (Post 2001-2002) are of relevance for analysis. The wind mill capacity added in Tamil Nadu during Regime B is 2037 MW, including the ones in this project activity.

Most of these projects in the Regime B have been structured as CDM Projects as per the details given below:

Total Projects in regime B (MW)	2470
Projects under Registration or Validation	1549
Current Projects that are being structured as CDM projects (Approximately)	500
Total – (app MW)	2049

(Source for UNFCCC: – <http://cdm.unfccc.int/Projects/registered.html>
<http://cdm.unfccc.int/Projects/validation.index.html>)

(The detailed list is provided to DOE)

It could be seen from the above table, a majority of projects which have started after 2003, have been structured as a CDM project.

From the above analysis, it can be seen that similar activities are not widely observed and commonly carried out, without CDM consideration.

Conclusion

It is clear from the above discussion that the other WTG projects that have not considered CDM benefits but have occurred before 2001-2002, had better policy and investment climate. And the wind power projects that are established after 2001-2002, are being structured as CDM projects and are at various stages of CDM project cycle. From the list provided above, it can be established that all the wind mill projects (for a few public information to ascertain stage of project cycle is not available) that are established after the year 2001-2002 have considered CDM revenues.

Serious CDM consideration:

The evidence for real and continuous action to determine serious CDM consideration of CDM revenue and efforts by TASMA to realize such revenue is provided below:

	Date	Project related activity	CDM related Activity	Evidence
P R O J E C T A C T I V I T Y	25/10/2001 & 26/10/2001	Wind Turbine Suppliers approached TASMA with a proposal to explain how investment in to Wind Turbine is viable option considering CDM revenue	Wind Turbine Suppliers approached TASMA with a proposal to explain how investment in to Wind Turbine is viable option considering CDM revenue	WTG Manufacturers' letter
	03/11/2001	Wind Turbine suppliers addressed TASMA Members		MoM & record of discussions
	07/02/2002		TASMA members meeting decided to frame general rules for bundling and obtaining CDM benefits	Text of General Rules
	30/07/2003	Proposal from Consultant to setup Coal based power plant		Copy of proposal
	23/08/2003	TASMA members meeting in which members enquired information such as wind turbine costs, PLF, availability of Debt and interest rates, Government benefits and CDM benefits. TASMA has also discussed alternative option of setting up Coal based Power plant. TASMA Chief Advisor clarified and also suggested for appointment of a	TASMA members meeting in which members enquired information such as wind turbine costs, PLF, availability of Debt and interest rates, Government benefits and CDM benefits. TASMA has also discussed alternative option of setting up Coal based Power plant. TASMA Chief Advisor clarified and also suggested for appointment of a consultant to prepare general investment	MoM & record of discussions



Y		consultant to prepare general investment guidelines for WTGs based in Tamilnadu.	guidelines for WTGs based in Tamilnadu.	
	02/02/2004	Consultant to prepare investment guidelines has been appointed		Copy of Appointment Letter
	22/12/2004	Investment Guidelines has been received from consultant which is printed and circulated to TASMA members		Copy of the Investment Guidelines prepared by investment consultant
	23/06/2005		Appointment of CDM Consultant by TASMA	Copy of Appointment Letter
P R O J E C T A	07/11/2005		Decision of TASMA to take up a new CDM project on request of its members and to include - Wind turbines of members who took investment decision in the year 2003 to 2005 but were not included in TASMA I due to lack of information supplied by proponents. - Wind turbines that will come into operation from 2005 to 2007	MoM & record of Discussions
	21/12/2005		Evaluation Committee has been appointed.	MoM & record of discussions
	28/03/2006		Meeting of evaluation committee	MoM of EVC
	23/05/2006		Meeting to evaluate the changes in (TASMA-II) according to ACM0002 Version-6	MoM of EVC
	27/08/2006		Meeting of evaluation committee	MoM of EVC



C T I V I T Y	29/11/2006		Meeting of evaluation committee	MoM of EVC
	29/12/2006		Meeting of evaluation committee	MoM of EVC
	2006-2007		1. Individual verification of machines in the site by TASMA and the consultant. 2. Initialised Development of Project Design Document (PDD)	
	27-03-2007		Meeting of evaluation committee	MoM of EVC
	04/04/2007		Proposal received from CantorCO2e as CDM consultant	Proposal of CantorCO2e
	27-06-2007		Meeting of evaluation committee	MoM of EVC
	03/08/2007		Appointment of CantorCO2e as CDM Consultant	Copy of Agreement with CantorCO2e
	28-09-2007		Meeting of evaluation committee for final consolidation of WTGs list of TASMA II	MoM of EVC
	05/10/2007		Quotation given by DOE's for providing the validation services for TASMA II project.	Copy of Quotation
	23/10/2007		Meeting to evaluate the changes/effect in (TASMA-II) according to tool to calculate Emission Factor, Version 1.1, EB 35 by CDM Team.	MoM of CDM Team
	22/10/2007		Application for Host Country Approval	Covering Letter
	13/11/2007		Meeting to withdraw the PDD from Host Country Approval.	MoM of General Meeting of TASMA
	16/12/2007		Meeting to evaluate the changes/effect in (TASMA-II) according to additionality tool, Version-4, EB 36. and ACM0002 Version-7 by the CDM	MoM of CDM Team



			Team	
	02/01/2008		Withdrawal of application for the Host Country Approval of the project due to certain amendments in the project	Letter of withdrawal addressed to Host Government
	20/05/2008		Meeting to evaluate the changes in (TASMS-II) according to latest “Tool for the demonstration and assessment of additionality” Version 5.2	MoM of CDM Team
	10/07/2008		Quote received from the DOE for the validation of the CDM project activity.	Quote of DOE
	12/07/2008		Agreement signed with the DOE for Validation	Covering Letter to the DOE
	14/08/2008		Meeting to evaluate the effects of EB-41 Guidelines for TASMA-II.	MoM of CDM Team
	7/12/2008		Meeting to evaluate the changes in (TASMA-II) according ACM0002 Version-8, EB44.	MoM of CDM Team
	16/02/2009		Meeting to evaluate the changes in (TASMA-II) according ACM0002 Version-9, EB45.	MoM of CDM Team

B.6. Emission reductions:

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B.6. Emission reductions:**B.6.1. Explanation of methodological choices:**

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Approach

Existing actual or historical emissions, as applicable – is used for this project activity.

Base Line Scenario

Electricity delivered to the grid by the project would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations described below.



The baseline emission factor (EF_y) is calculated as a combined margin (CM), consisting of the combination of operating margin (OM) and build margin (BM) factors according to the following three steps. Calculations for this combined margin are based on data from an official source and are made publicly available.

The detailed information on this Baseline is provided in annexure 3. The details of calculations are provided in section E.

The base line emission factor consists of two components:

Operating Margin – Impact of the output of the project activity on the output of existing plants.

Build Margin- Impact of the output of the project activity on delaying or avoiding the construction of future power plants:

The data used for calculation of CM has been collected based on the authentic reports from TNEB, CEA, MNRE and Ministry of Power. Generation data for the most recent 3 years has been used. All the references for the data used from the above sources have been given in Annex –3.

OM - has been calculated based on existing actual historical emission for the last 3 years average and BM - has been calculated based on the historic capacity addition in the recent 5 years, taking into consideration of the actual emission of the sample plants.

STEP 1: Calculate the Operating Margin Emission Factor(s) (EF_{OM,y})

ACM0002- Version 9 outlines following four options for calculation of OM.

- (a) Simple OM, or
- (b) Simple adjusted OM, or
- (c) Dispatch Data Analysis OM, or
- (d) Average OM.

Due to non-availability of archived dispatch data in the public domain for the southern grid, ‘Dispatch Data Analysis’ (1c) has not been chosen, though it should be the first methodological choice.

The simple OM method is chosen since the low cost/must run resources constitute less than 50% of the total generation by the plants in the southern grid.

Simple OM.

The Simple OM emission factor ($EF_{OM,simple,y}$) is calculated (Ex-ante) as the generation-weighted average emissions per electricity unit (tCO₂/MWh) of all generating sources serving the system (Southern Grid) , not including low-operating cost and must-run power plants:

$$EF_{OM,y} = [\sum F_{i,j,y} * COEF_{ij}] / \sum GEN_{i,j}$$



Where,

$EF_{OM,y}$ = Total GHG emissions and electricity generation supplied to the grid by the power plants connected to the grid excluding zero- or low-operating cost sources.

where $F_{i,j,y}$ is the amount of fuel i (in a mass or volume unit) consumed by relevant power sources j in year(s) y , j refers to the power sources delivering electricity to the grid, not including low-operating cost and must run power plants, and including imports to the grid, $COEF_{i,j,y}$ is the CO₂ emission coefficient of fuel i (tCO₂ / mass or volume unit of the fuel), taking into account the carbon content of the fuels used by relevant power sources j and the percent oxidation of the fuel in year(s) y , and $GEN_{j,y}$ is the electricity (MWh) delivered to the grid by source j .

The CO₂ emission coefficient $COEF_i$ is obtained as

$$COEF_i = NCV_i * EF_{CO_2,i} * OXID_i \dots\dots\dots(4)$$

where:

NCV_i is the net calorific value (energy content) per mass or volume unit of a fuel i , $OXID_i$ is the oxidation factor of the fuel (see page 1.29 in the 1996 Revised IPCC Guidelines for default values), $EF_{CO_2,i}$ is the CO₂ emission factor per unit of energy of the fuel i . where available, local values of NCV_i and $EF_{CO_2,i}$ should be used. If no such values are available, country-specific values (see e.g. IPCC Good Practice Guidance) are preferable to IPCC world-wide default values.

Emission Coefficient for Import from Other Electricity Systems is taken as 0 tCO₂/MWh (Refer to **option-a**, given in page number 3 of the ‘Tool to calculate the emission factor for an electricity system’)

Export from the project electricity system is not subtracted from electricity generation.

STEP 2. Calculate the Build Margin emission factor ($EF_{BM,y}$) as the generation-weighted average emission factor (tCO₂/MWh) of a sample of power plants m , as follows:

$$EF_{BM,y} = [\sum F_{i,m,y} * COEF_{i,m}] / \sum GEN_{m,y}$$

where $F_{i,m,y}$, $COEF_{i,m}$ and $GEN_{m,y}$ are analogous to the variables described for the simple OM method above for plants m .

The following option provided in the methodology ACM002-V 9 has been used for this PDD

Option 1. Calculate the Build Margin emission factor $EF_{BM,y}$ *ex-ante* based on the most recent information available on plants already built for sample group m at the time of PDD submission. The sample group m consists of either the five power plants that have been built most recently, or the power plant capacity additions in the electricity system that comprise 20% of the system generation (in MWh) and that have been built most recently.



Based on the above option, using the available data in the Southern Regional Grid from the CEA General Review, the most recent 20% of additional units is chosen as this would represent a larger, more representative of annual generation..

STEP 3: Calculate the Base Line Emission Factor – (EF_{y})

The baseline emission factor has been calculated as the weighted average of Operating Margin Emission Factor ($EF_{OM,y}$) and Build Margin Emission Factor – ($EF_{BM,y}$)

$$EF_y = W_{OM} * EF_{OM,y} + W_{BM} * EF_{BM,y}$$

where the weights W_{OM} and W_{BM} by default, are 50% (i.e., $w_{OM} = w_{BM} = 0.5$), and $EF_{OM,y}$ and $EF_{BM,y}$ are calculated as described in Steps 1 and 2 above and are expressed in tCO₂/MWh.

As ACM0002 Version 9 provides for wind and solar projects, the default weights are as: $W_{OM} = 0.75$ and $W_{BM} = 0.25$ (owing to their intermittent and non-dispatch able nature), this project activity uses the weights

$$W_{OM} = 0.75$$

$$W_{BM} = 0.25$$

As per ACM0002 version 9, no leakage has been considered for the calculation of emission factor.

The details of calculations of OM, BM and CM are shown in Annex-3.

B.6.2. Data and parameters that are available at validation:

(Copy this table for each data and parameter)

Data / Parameter:	EF_y
Data unit:	TCO ₂ e / GWh
Description:	CO ₂ emission factor for southern grid of India
Source of data used:	Based on “Tool to calculate the emission factor for an electricity system”, EF_y is calculated as the weighted average of OM Emission factor and BM emission factor.
Value applied:	925.63
Justification of the choice of data or description of measurement methods and procedures actually applied :	The calculation of EF_y is based on $EF_{OM,y}$ and $EF_{BM,y}$, as per “Tool to calculate the emission factor for an electricity system”
Any comment:	Detailed information is available in CO ₂ Base Line by CEA

Data / Parameter:	$EF_{OM,y}$
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Data unit:	TCO ₂ e / GWh
Description:	Operating Margin Emission Factor for southern grid of India
Source of data used:	Central Electricity Authority – CO2 Base Line Data Base
Value applied:	998.47
Justification of the choice of data or description of measurement methods and procedures actually applied :	The calculation EF _{OM,y} is as per “Tool to calculate the emission factor for an electricity system”.
Any comment:	Detailed information is available in CO2 Base Line by CEA

Data / Parameter:	EF _{BM,y}
Data unit:	TCO ₂ e / GWh
Description:	Build Margin Emission Factor for southern grid of India
Source of data used:	Central Electricity Authority – CO2 Base Line Data Base
Value applied:	710
Justification of the choice of data or description of measurement methods and procedures actually applied :	The calculation EF _{BM,y} is as per “Tool to calculate the emission factor for an electricity system”
Any comment:	Detailed information is available in CO2 Base Line by CEA

Data / Parameter:	F _{i,y}
Data unit:	Kgs
Description:	Quantity of Fuel used in kgs by different power plants
Source of data used:	Central Electricity Authority – CO2 Base Line Data Base
Value applied:	The values applied for different fuels are available in Central Electricity Authority: CO2 Baseline Database – Version 4
Justification of the choice of data or description of measurement methods and procedures actually applied :	CEA is legal / regulatory authorities of country, whose data is available publicly.
Any comment:	Detailed information is available in CO2 Base Line by CEA

Data / Parameter:	NCV _i
Data unit:	Kcal/ Kg
Description:	Net Calorific Value for different Fuels
Source of data used:	Central Electricity Authority - CO2 Base Line Data Base
Value applied:	The values applied for different fuels are available in Central Electricity Authority: CO2 Baseline Database – Version 4



Justification of the choice of data or description of measurement methods and procedures actually applied :	CEA is the legal / regulatory authorities of country, whose data is available publicly.
Any comment:	

Data / Parameter:	OXID _i
Data unit:	%
Description:	Oxidation factor for Fuel i
Source of data used:	IPCC Default values as mentioned in 2006 IPCC Guidelines for National Green House Gas Inventories
Value applied:	The values applied for different fuels are available in Central Electricity Authority: CO2 Baseline Database – Version 4
Justification of the choice of data or description of measurement methods and procedures actually applied :	CEA is the legal / regulatory authorities of country, whose data is available publicly.
Any comment:	

Data / Parameter:	EF _{CO₂,i}
Data unit:	KG of CO ₂ per KG of fuel
Description:	Oxidation factor for Fuel i
Source of data used:	IPCC Default values as mentioned in 2006 IPCC Guidelines for National Green House Gas Inventories
Value applied:	The values applied for different fuels are available in Central Electricity Authority: CO2 Baseline Database – Version 4
Justification of the choice of data or description of measurement methods and procedures actually applied :	CEA is the legal / regulatory authorities of country, whose data is available publicly.
Any comment:	

Data / Parameter:	Gen _{i,y}
Data unit:	GWh
Description:	Electricity supplied by each plant to the southern grid
Source of data used:	Central Electricity Authority – CO2 Base Line Data Base – www.cea.nic.in
Value applied:	The values applied for different fuels are available in Central Electricity Authority: CO2 Baseline Database – Version 4



Justification of the choice of data or description of measurement methods and procedures actually applied :	CEA is the legal / regulatory authorities of country , whose data is available publicly.
Any comment:	

B.6.3 Ex-ante calculation of emission reductions:

>>

Base Line Emissions: (BE_y)

Operating Margin of southern Grid of India - $EF_{OM,y} = 998.47 \text{ tCO}_2 \text{ e / GWh}$

Build Margin of southern Grid of India - $EF_{BM,y} = 710.0 \text{ tCO}_2 \text{ e / GWh}$

Emission Factor of southern Grid of India - $EF_y = 0.75 \times 998.47 + 0.25 \times 710 = 925.63 \text{ tCO}_2 \text{ e / GWh}$

$$BE_y = (EG_y \times EF_y)$$

EG_y = Electricity supplied by the project activity to the grid (MWh)

$$EG_y = 460.18 \times 8760 \times 0.1994 = 803810 \text{ MWh} = 803.81 \text{ GWh}$$

$$BE_y = 803.81 \times 925.63 = 744030.84 \text{ tCO}_2 \text{ e}$$

Project Emissions:

Based on ACM0002, the project emission, $PE_y = 0$.

Leakage

Based on ACM0002, there is no leakage for this project activity.

Emissions Reduction

For a given year, the emission reductions contributed by the project activity (ER_y) is calculated as follows:

$$ER_y = BE_y - PE_y - L_y$$

Where

BE _y	Base Line Emission for the year 'y'
ER _y	Emission reductions for the year 'y'
PE _y	Project Emissions for the year 'y'
L _y	Leakage for the year 'y'



The emission reductions will be calculated based of actual net electricity supplied to the grid, using the baseline emission factor presented above.

$$ER_y = BE_y = 744030.84 \text{ tCO}_2\text{e}$$

B.6.4 Summary of the ex-ante estimation of emission reductions:

>>

Year	Estimation of Project Activity Emissions (tonnes of CO ₂ e)	Estimation of Baseline Emissions (tonnes of CO ₂ e)	Estimation of Leakage (tonnes of CO ₂ e)	Estimation of Overall emissions reductions (tonnes of CO ₂ e)
2009-10	0	744031	0	744031
2010-11	0	744031	0	744031
2011-12	0	744031	0	744031
2012-13	0	744031	0	744031
2013-14	0	744031	0	744031
2014-15	0	744031	0	744031
2015-16	0	744031	0	744031
2016-17	0	744031	0	744031
2017-18	0	744031	0	744031
2018-19	0	744031	0	744031
Total (tonnes of CO ₂ e)	0	7440310	0	7440310

B.7 Application of the monitoring methodology and description of the monitoring plan:
B.7.1 Data and parameters monitored

(Copy this table for each data and parameter)

Data / Parameter:	EGy
Data unit:	GWh/y
Description:	Net electricity output to the Southern grid of India
Source of data to be used:	Actual measurement records (From energy meter reading at sub station)
Value of data applied for the purpose of calculating expected emission reductions in section B.5	The total generation considered for 10 years: 8038100 GWh The total generation considered as average per year: 803810GWh The year wise generation is given in the table in section B.4



Description of measurement methods and procedures to be applied:	Measured by 0.5 Class Meter – (accuracy $\pm 0.5\%$) Net generation = (Export- Import) To be certified by TNEB Statement Monthly Measurement by TNEB. JMR records by site engineer.
QA/QC procedures to be applied:	QA/QC of Monitoring Equipment Calibration procedure: Electricity meter is calibrated by the TNEB as per guideline provided by government.
Any comment:	Detailed Monitoring plan is discussed in B7.2 and Annexure-4

B.7.2 Description of the monitoring plan:

>>

The Management Structure for monitoring emission reductions would provide for:

- Operation and Maintenance
 - Maintenance of Meters and Calibration
 - Calculation of Emission Figures
 - Local Environmental Care
 - Changes in project boundary
 - Documents and Records
 - Periodic Review meetings
- TASMA through the project members will appoint a site in-charge, for each region with the responsibility of operation, maintenance and safety of WTGs.
 - The project sponsor / Project members will abide by all regulatory and statutory requirements as prescribed under the State and Central laws and regulations
 - The generation from the WTGs will be monitored by LCS meters attached with the wind mill and also by the main meter which is owned by TNEB.
 - Both meters shall meet the Indian and regional electricity authority's standards (with set calibration schedules).
 - The generation for the purpose of emission reduction calculation will be based on the TNEB meter, which is government owned and maintained.
 - All the monitoring data will be recorded and kept under safe custody of the site in-charge
 - Also any change within the project boundary, will be recorded and informed to TNEB (as per PPA/EPA/EWA) and also to TASMA.

Measurement Frequency:

Frequency of measurement by TNEB – Once in a month

Frequency of measurement by Site In charge – Once a month along with TNEB official

Calibration of the Energy Meter - This is carried out by TNEB (As per Government Norms)

No leakage is applicable for this project activity.



B.8 Date of completion of the application of the baseline study and monitoring methodology and the name of the responsible person(s)/entity(ies)

>>

V.Bharathi Kannan & Ravi Shankar have assisted the project proponent in determining the application of base line study and monitoring methodology whose contact details are as below:

V.Bharathi Kannan
M2/27,4th Cross,
R.M.Colony,
Dindigul-624001.
India.
Email id: cdmcoordinatorb4u@gmail.com

And

Ravi Shankar
CantorCO2e India Pvt Ltd
1009, Raheja Chambers
Free Press Journal Marg
Nariman Point,
Mumbai – 400021
India
Email Id: rshankar@cantorco2e.com

Date of completion of Baseline study: 30/11/2008

The above entity is not a project participant listed in Annex-1.

**SECTION C. Duration of the project activity / crediting period****C.1 Duration of the project activity:****C.1.1. Starting date of the project activity:**

>>

The project activity is a bundle of 812 WTGs. The purchase order for the first WTG is placed on 03/10/2003 and the last WTG is placed on 14/09/2007. Though technically the start date of the project is 03/10/2003, the bundle configuration has been finalised on 31st December 2007.

C.1.2. Expected operational lifetime of the project activity:

>>

20 years and 0 months

C.2 Choice of the crediting period and related information:**C.2.1. Renewable crediting period****C.2.1.1. Starting date of the first crediting period:**

>>

Not Applicable

C.2.1.2. Length of the first crediting period:

>>

Not Applicable

C.2.2. Fixed crediting period:**C.2.2.1. Starting date:**

>>

01/06/2009 or the date of registration whichever is later.

C.2.2.2. Length:

>>

10 Years and 0 months

**SECTION D. Environmental impacts**

>>

D.1. Documentation on the analysis of the environmental impacts, including transboundary impacts:

>>

As per the host country's existing Laws, Environmental Impact Assessment requirements are given in the latest schedule of Ministry of Environment and Forests (Government of India), Notification dated 14th September 2006 in which, the installation of wind mill activities does not require to undertake environmental impact assessment studies. (Ref: Environment Impact Assessment Notification S.O. 1533, dated 14th September 2006) (<http://envfor.nic.in/divisions/iass/notif/notif.htm>)

However, TASMA has gone into the aspect of impact analysis to assess the degree and nature of the impacts of their activity.

The project does not have any transboundary impacts.

D.2. If environmental impacts are considered significant by the project participants or the host Party, please provide conclusions and all references to support documentation of an environmental impact assessment undertaken in accordance with the procedures as required by the host Party:

>>

The aspect impact analysis does not indicate any significant aspect. Hence Environmental Impact Assessment is not applicable.

TASMA has Environmental Monitoring and control procedure which monitors Environmental parameters periodically.

**SECTION E. Stakeholders' comments**

>>

E.1. Brief description how comments by local stakeholders have been invited and compiled:

>> The local stakeholders have already been contacted for the first project of TASMA I. For the second project, a questionnaire survey was conducted covering the people living in the villages nearby the site.

The basic points covered in the questionnaire are given below:

Sl No	Questions
1.	What do you think about the environment in your locality?
2.	Is your environment affected by the wind mill?
3.	Is your TV Reception affected by the Windmill?
4.	Does the project affect the livelihood?
5.	Does the project improve the livelihood?
6.	Has employment increased due to the project?
7.	Is there Noise problem due to the wind mill?
8.	Is there water problem due to the windmill?
9.	Is there Vibration problem due to the windmill?
10.	Is there any problem with respect to construction?
11.	Does the wind mill affect the migration of birds?
12.	Does the wind mill affect the grazing of cattle?
13.	What are the benefits from the wind Mill?
14.	Comments and suggestions :

**E.2. Summary of the comments received:**

>>

The overall opinion expressed through the questionnaire was based on the experience of the local stake holders with the already existing windmills. The overall response was that the impact of windmills in the locality will be of positive nature.

The summary analysis of questionnaire survey is presented below:-

Sl No	Question	Response By Majority of respondents
1.	What do you think about the environment in your locality?	Very Good
2.	Is your environment affected by wind mill?	Not at all affected
3.	Is your TV Reception affected by Windmill?	Not at all affected
4.	Does the project affect the livelihood?	Not at all affected
5.	Does the project improve livelihood?	Good Improvement
6.	Has employment increased due to the project?	Good Improvement
7.	Is there Noise problem due to wind mill?	Not at all
8.	Is there water problem due to windmill?	Not at all
9.	Is there Vibration problem due to windmill?	Not at all
10.	Is there any problem with respect to construction?	Not at all
11.	Does the wind mill affect the migration of birds?	Not at all
12.	Does the wind mill affect the grazing of cattle?	Not at all
13.	What are the benefits from the wind Mill?	Good Benefits
14.	Comments and suggestions :	• Plantation to be considered • Approach roads should not affect water catchments • Provide employment for locals

E.3. Report on how due account was taken of any comments received:

>>

The following action plans have been identified:

- To plant trees and plantations wherever possible
- Make approach roads accessible to locals
- Provide employment opportunities to local people

**Annex 1****CONTACT INFORMATION ON PARTICIPANTS IN THE PROJECT ACTIVITY**

Organization:	Tamil Nadu Spinning Mills Association – (TASMA)
Street/P.O.Box:	24, 11 th Cross Street, Thiruvalluvar Nagar
Building:	Spencer Compound
City:	Dindigul
State/Region:	Tamil Nadu
Postfix/ZIP:	624 003
Country:	India
Telephone:	+91 451 2433637 / +91 451 2428756 / +91 451 2431513
FAX:	+91 451 2421467
E-Mail:	dispa@rediffmail.com , tasma_dispa@yahoo.co.in
URL:	www.tasma.co.in
Represented by:	K.Venkatachalam
Title:	Chief Advisor
Salutation:	Mr.
Last Name:	
Middle Name:	
First Name:	
Department:	All
Mobile:	+91 98421 33318 / +91 94433 69858
Direct FAX:	+91 451 2421467
Direct tel:	+91 451 2431513
Personal E-Mail:	kvmasterminds@gmail.com



Annex 2

INFORMATION REGARDING PUBLIC FUNDING

No public funding has been made use for this project activity

**Annex 3****Base Line Information**

	COMBINED MARGIN – CM		
Southern Grid	OM (tCO₂/GWh)	998.42	Reference : Central Electricity Authority: CO ₂ BASELINE DATABASE Version 4.0 based on “ Tool to Calculate the Emission Factor for an Electricity System Version 1.1
	BM (tCO₂/GWh)	710	
	CM (tCO₂/GWh)	925.625	

(Weight of 75% taken for operating margin and weight of 25% taken for Build Margin)



Annex 4

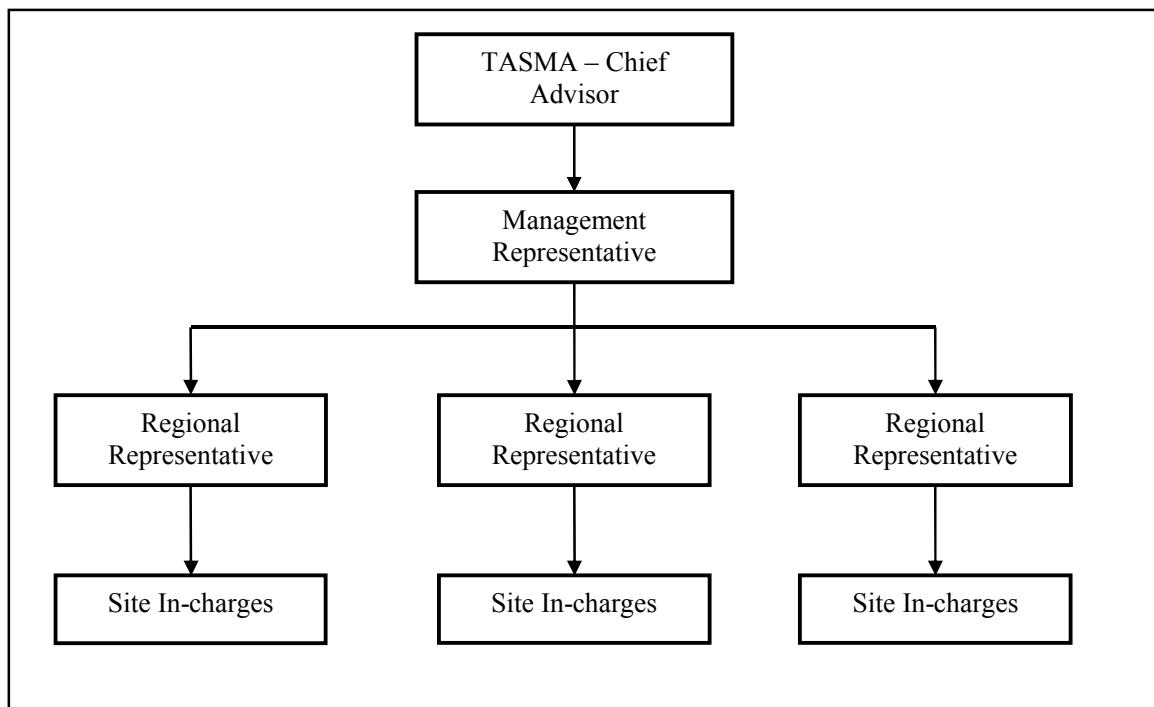
MONITORING INFORMATION

The monitoring plan proposed for the project activity will be centrally executed by TASMA. The monitoring plan will cover these following aspects.

1. Management Structure:
2. Operation and Maintenance
3. Maintenance of Meters and Calibration
4. Calculation of Emission Figures
5. Local Environmental Care
6. Changes in project boundary
7. Documents and Records
8. Periodic Review meetings

1. Management Structure

The monitoring activity will be centrally executed by TASMA. The organization for monitoring will be as follows:





1.1 SYSTEMS AND PROCEDURES

Detailed systems and procedures will be documented and maintained to implement the monitoring Plan. Following are general guidelines for metering and monitoring. For all these activities detailed procedures will be maintained. After some time, these systems will be upgraded based on guidelines of ISO 9001 quality management system.

2. OPERATIONS AND MAINTENANCE

Identification of WTGs

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

Company ID+ WTG ID

This will be painted in each machine and maintained in all records.

The site in-charges will be responsible for operation and maintenance.

The Operation and maintenance activities will include:

- Ensuring Preventive Maintenance
- Ensuring Break Down Maintenance
- Machine operation including resetting
- Recording Generation
- Transmitting Data to TASMA

Data capturing for the above will be done using controlled format.

3. MAINTENANCE OF METERS AND CALIBRATION

Metering:

The delivered Energy shall be metered by the parties at the high voltage side of the step-up Transformer installed at the project site.

Metering Equipment:

Metering equipment shall be electronic multipurpose meter of accuracy class 0.5% required for the project (both main and check meters). The main meter shall be installed and owned by TNEB and check meter shall be installed and maintained by the owner of the project, at the Local Control System (LCS).

**Joint Meter Reading:**

The monthly meter reading (both main and check meter) is being taken jointly by the Parties (TNEB and the Site In-charge) on a fixed day of the month. At the conclusion of meter reading on each occasion, an appointed representative of the TNEB shall sign the meter card provided for this purpose and the said entries will be verified by the site in-charge. The main meter reading will be used for recording electricity generation and the check meter is only used for cross checking the main meter reading. Emission reduction calculation is based on the main meter reading.

Inspection of Energy Meters:

The main energy meter (export and import) shall be of 0.5% accuracy class. Each meter shall be jointly inspected and the main meter is sealed by the TNEB and shall not be interfered other than TNEB.

Calibration and Maintenance of Main Meter:

The generation registered by the main meter alone will hold good for the purpose of billing as long as the error in the main meter is within the permissible limits. The calibration of the main meter will be the responsibility of the TNEB. The calibration of the main meter will be done as per the procedure set by CEA.

If, on any occasion, it is found that the main meter is beyond permissible limit of error, TNEB will be informed about it and TNEB will make necessary efforts to correct the meter and recalibrate the same. During the time when the main meter is not functional, the check meter may be used for measuring the units generated.

Interconnection and Metering Facilities: The sub project owner shall provide dedicated core for the check Metering.

Communication Facilities: In each site, minimum communication facilities such as telephone or wireless or mobile phone is provided.

Calculation of Emission Figures

TASMA will be responsible to calculate the emission figures.

Calculation of emission figures will be based on the recorded generation for a period and the emission factor recorded in the PDD.

Local Environmental Care

A Simple operational control check list for EMS will be provided for each project site. The site in-charge will carry out the operational control review once in 6 months and the report will be sent to TASMA. The non-conformities will be recorded and corrective actions will be taken.



Changes in Project Boundary

Changes in Project boundary in any event will be monitored and recorded by TASMA.

Documents and Records

All documents will be numbered and identified along with retention periods.

The Key records that will be maintained are:

- Project Activity Matrix giving all ID details
- Monthly Working Details of WTGs
- Monthly Generation Details
- CERs Computed on a yearly basis
- Records of Management Review

Periodic Review Meetings

Management Review meetings will be conducted by TASMA once in three months with all Regional Representatives and Management Representative. All project related matters will be discussed with a structured agenda, and action plans will be identified. The minutes of the meetings will be recorded.



Appendix -1

Project's Contribution to Sustainable Development

The Project sub activities in different locations contribute to the sustainable development of the region and country, by creating value in the economic, social and Environmental fronts. The various dimensions of the development attempted by the project activity are as under:

Contribution to Economic Value

- Development of Rural / Backward areas
- Most of the sites where these wind mills are located are backward areas and the large scale presence of windmills here increases direct and indirect employment opportunities to approximately 500 new direct employments.
- This way, the wind mill can contribute to country's rural development programs.
- The increasing demand in energy in the State of Tamil Nadu can be met out by the energy share of wind mills
- Land Values have considerably increased
- Local trade and commercial activities such as shops, lodging- houses etc have increased
- New business areas like weigh- bridges etc have opened up.

Contributions to Environment

- Wind power is a renewable energy and there is no depletion of resources
- There is no emission in wind power
- There is no treated effluent since there is no water consumption
- There is no problem of solid waste handling
- There is not much of noise and heat emissions
- The Initial environmental study shows that there is no significant impact on land, water or air.
- The area around the windmill can be used for plantation. In fact TASMA has plans to plant Jetropa (Bio-Fuel) in all the sites.

Contributions to Social Value

- Most of the local labour are trained in wind mill operation and maintenance resulting in skill improvement
- Local people are exposed to new technology.
- Life style and culture of the local people have improved
- Transport facilities including roads and rails have improved
- Communication has improved drastically in the villages and in the remote hilly terrains, where the projects are situated.
- The project has brought road and approach paths to these areas.
- The windmill sites and approach paths have facilitated grazing of cattle.



Contributions to Technological Value

- Helped in development of Central Monitoring System (CMS)
- New Variant of Model suited to the local conditions has been developed.

**Appendix –2 Abbreviations**

Abbreviations	Meaning	Abbreviations	Meaning
ACM	Approved Consolidated Methodology	MNRE	Ministry of New and Renewable Energy
BAU	Business As Usual	MoM	Minutes of Meeting
BEF	Baseline Emission Factor	NCDMA	National CDM Authority
BM	Build Margin	NCES	Non-Conventional Energy Sources
CDM	Clean Development Mechanism	ODA	Official Development Assistance
CEA	Central Electricity Authority	OM	Operating Margin
CER	Certified Emission Reduction	PPA	Power Purchase Agreement
CM	Combined Margin	QA / QC	Quality Assurance / Quality Control
CO ₂	Carbon Dioxide	SEB	State Electricity Board
COP	Conference of Parties	TASMA	Tamil Nadu Spinning Mills Association
DCS	Distributed Control System	TNEB	Tamil Nadu Electricity Board
DNA	Designated National Authority	TNPCB	Tamil Nadu Pollution Control Board
DOE	Designated Operational Entity	TNERC	Tamil Nadu Electricity Regulatory Commission
DPR	Detailed Project Report	TPS	Thermal Power Station
DSCR	Debt Service Coverage Ratio	WTG	Wind Turbine Generator
EB	Executive Board		
EIA	Environmental Impact Assessment		
EMS	Environmental Management System		
EPA	Energy Purchase Agreement		
EVC	Evaluation Committee		
EWA	Energy Wheeling Agreement		
GHG	Green House Gases		
HTSC	High Tension Service Connection		
INR	Indian Rupee		
IPCC	Inter Governmental Panel on Climatic Change		
IPP	Independent Power Producers		
IREDA	Indian Renewable Energy Development Agency		
IRR	Internal Rate of Return		
ISO	International Organization for Standardization		
KW	Kilowatt		
LCS	Local Control System		

**Appendix-3 – WTG Identification, Location and HTSC Number**

Comp Code No	Name of the company	WTG No	Capacity in Kw	HTSC NO	Latitude	Longitude
C001	Adisankara Spinning Mills (P) Ltd	2.01	750	1285	N 10° 67' 68"	E 077° 18' 28"
C001	Adisankara Spinning Mills (P) Ltd	2.02	750	1288	N 10° 69' 12"	E 077° 17' 43"
C002	Alpine knits India Pvt. Ltd	2.01	250	359	N 10° 92' 59.1"	E 077° 14' 43.3"
C002	Alpine knits India Pvt. Ltd	2.02	250	482	N 10° 94' 16.3"	E 077° 25 095"
C002	Alpine knits India Pvt. Ltd	2.03	250	589	N 10° 95' 20.8"	E 077° 27 16.3"
C003	Ambika Cotton Mills Ltd	2.01	800	1258	N 11° 85' 72.3"	E 076° 74' 82"
C004	Ammarun Foundries	2.01	850	497	N 10° 89 350	E 077° 24' 32.7"
C004	Ammarun Foundries	2.02	850	498	N 10° 89' 72.9"	E 077° 24' 36.7"
C005	Anand Hosieries	2.01	500	417	N 10° 54' 16.1"	E 077° 08' 45.4"
C006	Anand Textiles	2.01	1250	322	N 10° 52' 59.9"	E 077° 07' 38.6"
C006	Anand Textiles	2.02	1250	325	N 10° 52' 19.0"	E 077° 08' 10.9"
C006	Anand Textiles	2.03	500	416	N 10° 54' 21.0"	E 077° 08' 41.7"
C007	Angalakshmi Spinning Mills	2.01	500	1826	N 08° 55' 28.4"	E 077° 3' 45.1"
C008	Angalaparameswari Textiles	2.01	250	529	N 10° 94' 69.5"	E 077° 26' 39.5"
C009	Annai Power (P) Ltd	2.01	225	1303	N 08° 19' 54.92"	E 077° 34' 11.81"
C010	Anugraha Valve Castings Ltd	2.01	1250	1182	N 08° 13' 23.3"	E 077° 39' 44.2"
C010	Anugraha Valve Castings Ltd	2.02	1250	2193	N 08° 57' 40.3"	E 077° 35' 14.0"
C010	Anugraha Valve Castings Ltd	2.03	1250	2221	N 08° 55' 54.8"	E 077° 35' 20.7"



CDM – Executive Board

page 56

C011	Anugraha Valve Castings Ltd (UNIT V)	2.01	350	1313	N 08° 56' 23.9"	E 077° 35' 25.0"
C012	Armstrong Process	2.01	500	1261	N 08° 12' 35.3"	E 077° 36' 29.2"
C013	Armstrong Spinning Mills (P) Ltd	2.01	500	1559	N 08° 15' 18.0"	E 077° 43' 57.7"
C013	Armstrong Spinning Mills (P) Ltd	2.02	500	1636	N 08° 12' 44.5"	E 077° 37' 28.1"
C013	Armstrong Spinning Mills (P) Ltd	2.03	500	2012	N 08° 15' 12.1"	E 077° 43' 48.5"
C014	Arul & Co	2.01	225	1280	N 08° 13' 23.59"	E 077° 35' 52.63"
C015	Arul Sakthi Wind Farm (P) Ltd	2.01	250	1222	N 10° 75' 65.2"	E 077° 36' 81.2"
C015	Arul Sakthi Wind Farm (P) Ltd	2.02	250	1222	N 10° 75' 71.9"	E 077° 37' 01.4"
C016	Arun Dye Chem	2.01	225	894	N 10° 43' 29.8"	E 077° 21' 22.5"
C017	Arun Excelllo Urban Infrastructure Pvt. Ltd	2.01	225	2018	N 08° 11' 57.0'	E 077° 34' 20.0"
C017	Arun Excelllo Urban Infrastructure Pvt. Ltd	2.02	225	2018	N 08° 11' 51.9"	E 077° 34' 29.6"
C017	Arun Excelllo Urban Infrastructure Pvt. Ltd	2.03	225	2018	N 08° 11' 64.8"	E 077° 34' 21.2"
C018	Arun Fabricators	2.01	225	2436	N 08° 11' 45.4"	E 077° 34' 07.4'
C019	Arvinth Hospital	2.01	250	241	N 08° 15' 10.42"	E 077° 33' 10.42"
C019	Arvinth Hospital	2.02	250	89	N 08° 14' 52.92"	E 077° 32' 21.69"
C020	AVE Maria Spinning Mills (P) Ltd	2.01	350	2167	N 08° 18' 05.2"	E 077° 36' 33.0"
C021	AVR SS Builders	2.01	350	2385	N 08° 16' 45.4"	E 077° 36' 18.2"
C022	AVR Swarna Mahal	2.01	600	92	N 08° 59' 01.7"	E 077° 32' 52.4"
C022	AVR Swarna Mahal	2.02	1250	1980	N 10° 36' 52.1"	E 077° 25' 57.8"
C023	B.K.S.Textiles Pvt Ltd.,	2.01	225	438	N 10° 40' 54.3"	E 077° 20' 19.3"
C023	B.K.S.Textiles Pvt Ltd.,	2.02	225	594	N 10° 40' 49.2"	E 077° 20' 54.2"



CDM – Executive Board

page 57

C024	Balavimothan Power Process (P) Ltd	2.01	250	1163	N 10° 76' 51.0"	E 077° 37' 22.8"
C025	Balu Exports	2.01	750	406	N 10° 41' 01.1"	E 077° 22' 87.3"
C025	Balu Exports	2.02	750	453	N 10° 41' 43.1"	E 077° 22' 89.4"
C025	Balu Exports	2.03	750	590	N 10° 41.243"	E 077° 25' 51.7"
C025	Balu Exports	2.04	750	888	N 10° 41' 18.9"	E 077° 25' 31.6"
C025	Balu Exports	2.05	750	889	N 10° 41' 31.4"	E 077° 25' 27.6"
C025	Balu Exports	2.06	750	920	N 10° 41' 44.4"	E 077° 25' 19.1"
C026	Best & Co	2.01	1250	865	N 10° 41' 40.7"	E 077° 25' 46.3"
C026	Best & Co	2.02	1250	866	N 10° 41' 55.4"	E 077° 25' 25.2"
C026	Best & Co	2.03	1250	867	N 10° 42' 06.8"	E 077° 25' 16.8"
C026	Best & Co	2.04	1250	868	N 10° 42' 03.2"	E 077° 24' 59.9"
C026	Best & Co	2.05	1250	869	N 10° 42' 10.1"	E 077° 24' 36.1"
C026	Best & Co	2.06	1250	921	N 10° 40' 04.2"	E 077° 24' 32.7"
C026	Best & Co	2.07	1250	922	N 10° 39' 50.3"	E 077° 24' 37.1"
C026	Best & Co	2.08	1250	932	N 10° 37' 38.7"	E 077° 07' 54.4"
C026	Best & Co	2.09	1250	930	N 10° 37' 11.3"	E 077° 08' 00.2"
C026	Best & Co	2.10	1250	929	N 10° 36' 55.7"	E 077° 08' 02.3"
C026	Best & Co	2.11	1250	928	N 10° 36' 56.4"	E 077° 08' 22.0"
C026	Best & Co	2.12	1250	931	N 10° 36' 42.0"	E 077° 07' 58.7"
C026	Best & Co	2.13	1250	933	N 10° 38' 09.2"	E 077° 07' 42.4"
C026	Best & Co	2.14	1250	934	N 10° 37' 50.1"	E 077° 08' 14.8"
C026	Best & Co	2.15	1250	927	N 10° 37' 35.2"	E 077° 08' 15.0"
C026	Best & Co	2.16	1250	935	N 10° 38' 01.3"	E 077° 08' 43.2"
C026	Best & Co	2.17	1250	925	N 10° 37' 45.4"	E 077° 08' 44.8"
C026	Best & Co	2.18	1250	926	N 10° 37' 32.5"	E 077° 08' 52.9"
C026	Best & Co	2.19	1250	924	N 10° 37' 37.7"	E 077° 09' 20.2"
C026	Best & Co	2.20	1250	923	N 10° 37' 50.5"	E 077° 09' 29.7"



CDM – Executive Board

page 58

C027	Best Cotton Mills (P) Ltd	2.01	1250	1450	N 08° 14' 18.6"	E 077° 41' 15.2"
C028	Best Heat Treatment Services	2.01	350	1383	N 10° 35' 46.7"	E 077° 17' 33.8"
C029	Best International	2.01	1250	1350	N 08° 13' 14.7"	E 077° 41' 23.2"
C029	Best International	2.02	1250	1353	N 08° 13' 15.5"	E 077° 41' 35.0"
C030	Bhuvaneshwari Textiles (P) Ltd	2.01	500	527	N 10° 56' 47.1"	E 077° 13' 15.6"
C031	Bhuvaneshwari Cotspin India (P) Ltd	2.01	500	520	N 07° 43' 85.4"	E 012 11 43.3
C031	Bhuvaneshwari Cotspin India (P) Ltd	2.02	500	521	N 07 44 07.9	E 121 10 38
C031	Bhuvaneshwari Cotspin India (P) Ltd	2.03	500	522	N 07 44 28.7	E 121 13 04
C031	Bhuvaneshwari Cotspin India (P) Ltd	2.04	600	537	N 07 44 98.8	E 121 17 16
C031	Bhuvaneshwari Cotspin India (P) Ltd	2.05	600	538	N 07 44 58.7	E 121 15 65
C031	Bhuvaneshwari Cotspin India (P) Ltd	2.06	600	539	N 07 44 57.9	E 121 17 76
C032	BMM Paper Board (P) Ltd	2.01	750	770	N 08° 59' 04.1"	E 077° 21' 01.0"
C033	Bright Castings	2.01	350	1371	N 10° 35' 46.1"	E 077° 17' 43.6"
C034	Brindavan Cotton Mills (P) Ltd.,	2.01	1250	1372	N 10° 40' 38.8"	E 077° 09' 43.1"
C034	Brindavan Cotton Mills (P) Ltd.,	2.02	750	398	N 10° 40' 39.5"	E 077° 09' 56.4"
C034	Brindavan Cotton Mills (P) Ltd.,	2.03	750	400	N 08° 10' 18.2"	E 077° 37' 55.7"
C035	C. Revathi	2.01	250	487	N 10° 82' 56 .0	E 077° 18' 59.2"
C036	C.V.Spinners (P) Ltd	2.01	750	1095	N 10 41 53.2	E 077 28 52.1
C037	Cheran Spinners Limited	2.01	1650	1490	N 08 56 41.2	E 077 28 22.3
C037	Cheran Spinners Limited	2.02	750	2013	N 09 02 63.0	E 077 25 21.6



CDM – Executive Board

page 59

C037	Cheran Spinners Limited	2.03	750	2469	N 09 02 37.8	E 077 25 12.9
C038	Cheran Spinning Mills (P) Ltd	2.01	1250	1970	N 08 10 23.3	E 077 39 22.1
C039	Chiranjilal Spinners (P) Ltd	2.01	750	1686	N 08 58 12.6	E 077 30 14.9
C040	Chola Spinning Mills Pvt. Ltd	2.01	750	2016	N 09 01 42.7	E 077 24 76.6
C040	Chola Spinning Mills Pvt. Ltd	2.02	750	2017	N 09 01 14.8	E 077 24 56.6
C041	Chola Textiles (P) Ltd	2.01	1250	1979	N 08 09 50.1	E 077 38 37.3
C042	Classic Wind Farms	2.01	600	645	N 10 56' 31.7"	E 077 20' 27.1"
C042	Classic Wind Farms	2.02	600	639	N 10 56' 33.8"	E 077 20' 15.6"
C042	Classic Wind Farms	2.03	600	554	N 10 56' 17.4"	E 077 14' 35.1"
C042	Classic Wind Farms	2.04	600	600	N 10 56' 41.7"	E 077 20' 13.0"
C042	Classic Wind Farms	2.05	600	601	N 10 56' 48.8"	E 077 20' 09.8"
C043	Color Chemicals	2.01	250	2060	N 08 ⁰ 11'05.69"	E 077 ⁰ 35'27.70"
C043	Color Chemicals	2.02	250	2079	N 08 ⁰ 12'27.77"	E 077 ⁰ 36'31.26"
C044	CR Mills (Coimbatore) Pvt Ltd.,	2.01	350	1204	N 08 14 29.8	E 077 38 08.5
C045	D. Ganthimathi	2.01	250	452	N 10 93 19.2	E 077 13 75.0
C046	D. Parthiban	2.01	250	488	N 10 82 55.0	E 077 18 60.5
C047	D.M. Kathir Anand	2.01	225	598	N 10 46 08.1	E 077 22 20.9
C047	D.M. Kathir Anand	2.02	600	1491	N 10 50 20.3	E 077 24 57.0
C048	D.M.R. Textiles	2.01	250	354	N 10 92 68.6	E 077 14 10.4
C048	D.M.R. Textiles	2.02	250	355	N 10 92 56.9	E 077 14 15.9
C049	Dev International	2.01	500	1595	N 09 ⁰ 01' 48.0"	E 077 ⁰ 21' 56.8"
C050	Dev International	2.01	225	431	N 10 ⁰ 41' 56.9"	E 077 ⁰ 21' 578"
C050	Dev International	2.02	225	431	N 10 ⁰ 42' 01.6"	E 077 ⁰ 21' 58.2"
C050	Dev International	2.03	225	585	N 10 ⁰ 55' 30.6"	E 077 ⁰ 15' 57.7"
C050	Dev International	2.04	250	674	N 10 ⁰ 92' 38.2"	E 077 ⁰ 26' 46.9"
C051	Deventhira Spinners Pvt Ltd	2.01	500	669	N 08 ⁰ 18' 58.1"	E 077 ⁰ 34' 91.7"
C051	Deventhira Spinners Pvt Ltd	2.02	500	996	N 08 ⁰ 56' 00.7"	E 077 ⁰ 32' 08.3"



CDM – Executive Board

page 60

C051	Deventhira Spinners Pvt Ltd	2.03	500	997	N 08° 55' 75.0"	E 077° 31' 96.9"
C052	Divyalakshmi Mills Pvt Ltd	2.01	225	778	N 10° 39' 13.2"	E 077° 19' 27.6"
C052	Divyalakshmi Mills Pvt Ltd	2.02	500	337	N 10° 40' 13.2"	E 077° 19' 02.3"
C052	Divyalakshmi Mills Pvt Ltd	2.03	225	1297	N 10° 39' 17.5"	E 077° 19' 27.8"
C053	Dixcy Textiles (P) Ltd	2.01	750	1413	N 08 57 23.0	E 077 29 37.7
C054	Durgesh Nandhini Oil Mills Spinning Division	2.01	500	1792	N 09 03 03.2	E 077 23 76.4
C054	Durgesh Nandhini Oil Mills Spinning Division	2.02	500	1794	N 09° 03 08.4	E 077 23 98.2
C054	Durgesh Nandhini Oil Mills Spinning Division	2.03	500	1795	N 09 03 19.6	E 077 23 92.5
C054	Durgesh Nandhini Oil Mills Spinning Division	2.04	500	1786	N 09° 3 02	E 077° 24 67.9
C055	Easwari Knitting Works	2.01	800	1250	N 07 66 95.5	E 011 82 88.5
C056	Elgi Automotive Services Ltd.,	2.01	500	1474	N 09° 02' 26.8"	E 077° 21' 56.3"
C057	Elgitread (India) Ltd	2.01	1500	1434	N 10 49 04.1	E 077 05 44.9
C058	Enkay Enterprise	2.01	250	1435	N 10° 38' 18.4"	E 077° 19' 03.5"
C059	Ess Kay Yarn Dyeings	2.01	250	1436	N 10° 38' 23.2"	E 077° 19' 02.7"
C060	Eswari Creations	2.01	225	1281	N 08° 14' 30.27"	E 077° 35' 37.86"
C061	Eveready Spinning Mills (P) Ltd	2.01	1250	1779	N 08 14° 28.0'	E 077 41 26.3'
C062	Excel Cotspin (India) (P) Ltd	2.01	1250	1713	N 08 10 05.9	E 077 38 18.1
C063	Expofab	2.01	850	1508	N 08 12 22.3	E 077 37 19.5
C064	Fab Colours	2.01	225	707	N 10° 43' 48.8"	E 077° 21' 15.1"
C065	Fab-N-Fabrics	2.01	750	1085	N 08 59 49.0	E 077 21 14.9
C065	Fab-N-Fabrics	2.02	750	1535	N 08° 57 35.5	E 077 30 02.7
C065	Fab-N-Fabrics	2.03	350	333	N 10 56 09.4	E 077 050 30.1



CDM – Executive Board

page 61

C066	Ferro Links	2.01	1250	2178	N 09 00 02.0	E 077 32 25.4
C067	Fisher Spinning Mills India (P) Ltd	2.01	1250	1848	N 08 14' 18.0"	E 077 41' 31.2"
C067	Fisher Spinning Mills India (P) Ltd	2.02	1250	1705	N 08 14' 47.4"	E 077 41' 34.9"
C067	Fisher Spinning Mills India (P) Ltd	2.03	1250	1780	N 08 14' 57.2"	E 077 41' 31.6"
C067	Fisher Spinning Mills India (P) Ltd	2.04	1250	1782	N 08 15' 10.1'	E 077 41' 11.2'
C067	Fisher Spinning Mills India (P) Ltd	2.05	1250	1781	N 08 14' 59.7'	E 077 41' 13.2'
C067	Fisher Spinning Mills India (P) Ltd	2.06	1250	1876	N 08 15 27.9'	E 077 41' 27.6'
C068	Forknits	2.01	750	404	N 10 41' 28.6	E 077 24 93.0
C068	Forknits	2.02	750	591	N 10 41 37.8	E 077 25 47.4
C069	Frontline Chemicals	2.01	225	1299	N 10 ⁰ 44' 34.1"	E 077 ⁰ 23' 41.4"
C069	Frontline Chemicals	2.02	225	1299	N 10 ⁰ 44' 38.8"	E 077 ⁰ 23' 40.6"
C070	G.K.Wind Farms India (P) Ltd	2.01	250	632	N 10 66 10.5	E 077 32 86.6
C071	G.R. Natarajan & Co.,	2.01	350	2165	N 08 17 54.0	E 077 36 32.7
C071	G.R. Natarajan & Co.,	2.02	350	2411	N 08 17 43.9	E 077 37 40.9
C072	G.R. Thanga Maligai (Firm)	2.01	600	836	N 09 ⁰ 21' 85.0	E 078 ⁰ 51' 17
C072	G.R. Thanga Maligai (Firm)	2.02	600	1011	N 09 ⁰ 21' 60.7	E 078 ⁰ 51' 03
C073	G.R. Thangamaligai Jewellers (P) Ltd.,	2.01	600	1010	N 09 ⁰ 21' 30.06	E 078 ⁰ 34' 81
C074	G.R. Thangamaligai Pearl & Kundan Jewellery	2.01	500	383	N 10 ⁰ 39' 20.08	E 077 ⁰ 19' 52.8
C075	G.R.Thanga Malligai	2.01	600	725	N 09 ⁰ 21' 62.1	E 078 ⁰ 51' 14
C076	Gangai Garments	2.01	500	552	N 10 56 58.7	E 077 14 17.4
C076	Gangai Garments	2.02	500	553	N 10 56 51.9	E 077 14 23.1
C077	Gangotri Textiles Ltd	2.01	1650	1260	N 10 36 77.7	E 077 19 81.0
C077	Gangotri Textiles Ltd	2.02	1650	1261	N 10 36 64.0	E 077 20 31.7
C077	Gangotri Textiles Ltd	2.03	1650	1262	N 10 36 26.9	E 077 19 77.6



CDM – Executive Board

page 62

C078	Gates Wears	2.01	250	1232	N 10° 41' 36.3	E 077° 23' 33.3
C079	Global Polybags Industries (P) Ltd	2.01	1250	1369	N 08 10 44.2	E 077 38 33.2
C079	Global Polybags Industries (P) Ltd	2.02	1250	1454	N 08 10 55.8	E 077 38 24.7
C080	Gomathi Spinning Mills India (P) Ltd	2.01	1250	2073	N 08 11 47.5	E 077 39 04.3
C081	Gomuki Spinning Mills Pvt Ltd	2.01	225	978	N 10° 42' 43.2"	E 077 23' 29.1"
C081	Gomuki Spinning Mills Pvt Ltd	2.02	225	954	N 10° 42' 23.5"	E 077 23' 36.7"
C081	Gomuki Spinning Mills Pvt Ltd	2.03	225	1117	N 10° 42' 21.1"	E 077 23' 36.4"
C081	Gomuki Spinning Mills Pvt Ltd	2.04	225	1134	N 10° 43' 10.3"	E 077 23' 41.5"
C081	Gomuki Spinning Mills Pvt Ltd	2.05	225	1134	N 10° 43' 14.9"	E 077 23' 43.2"
C081	Gomuki Spinning Mills Pvt Ltd	2.06	225	1183	N 10° 42' 53.8"	E 077 22' 38.7"
C081	Gomuki Spinning Mills Pvt Ltd	2.07	225	1184	N 10° 42' 55.7"	E 077 22' 48.6"
C081	Gomuki Spinning Mills Pvt Ltd	2.08	225	1184	N 10° 42' 00.9"	E 077 22' 49.4"
C081	Gomuki Spinning Mills Pvt Ltd	2.09	225	1183	N 10° 42' 57.7"	E 077 22' 38.1"
C081	Gomuki Spinning Mills Pvt Ltd	2.10	225	1183	N 10° 42' 02.5"	E 077 22' 37.7"
C081	Gomuki Spinning Mills Pvt Ltd	2.11	225	1294	N 10° 42' 49.2"	E 077 22' 44.9"
C082	Goodluck Windfarms India (P)Ltd	2.01	225	1307	N 08° 13'37.43"	E 077 36'15.43"
C083	Goodwill Apparels	2.01	225	715	N 10 42'.030"	E 077 23'.631"
C083	Goodwill Apparels	2.02	225	715	N 10 41'.950"	E 077 23'.622"
C084	Goyal Ispat Ltd	2.01	600	814	N 09 21 81.8	E 078 60 15.1
C084	Goyal Ispat Ltd	2.02	600	1095	N 09 15 07.8	E 079 10 55.2
C084	Goyal Ispat Ltd	2.03	600	1096	N 09 15 37.4	E 079 10 61.6
C085	GRT Hotels and Resorts Pvt Ltd.,	2.01	600	949	N 09° 21' 75.6	E 078° 44' 24
C086	Guhan Textile Mills Pvt Ltd	2.01	1250	1336	N 08 10 44.6	E 077 38 59.2



CDM – Executive Board

page 63

C087	Guru Paper Mills (P) Ltd	2.01	750	1924	N 08 59.119	E 077 27.750
C088	Hazel Mercantile Ltd	2.01	1250	1196	N 10 42 41.4	E 077 24 19.5
C088	Hazel Mercantile Ltd	2.02	1250	1197	N 10 42 30.5	E 077 24 23.8
C089	Hotel A.R.A.P Pvt Ltd	2.01	350	1316	N 10 35 08.7	E 077 19 01.8
C090	Impact Fashions	2.01	225	1000	N 10 67 19	E 077 39 72
C090	Impact Fashions	2.02	225	1087	N 10 67 01	E 077 39 .4
C090	Impact Fashions	2.03	225	1088	N 10 67 14	E 077 39 41
C091	Jai Hind Spinning Mills Ltd	2.01	1250	938	N 08 56 20.3	E 077 40 15.2
C092	Jain Hashmukh Pukhraj	2.01	330	1002	N 07 60 03.3	E 011 88 79.2
C093	Jain Jindas Pukhraj	2.01	330	1001	N 07 60 04.1	E 011 88 96.3
C094	Jain Mahendra Pukhraj	2.01	330	1189	N 07 69 73.1	E 011 85 47.0
C095	Jansons Industries Ltd	2.01	1250	2211	N 09 00 17.3	E 077 33 04.1
C096	Jayachandra Bearings (India) Pvt. Ltd	2.01	250	1164	N 10 76 21.5	E 077 36 99.7
C097	Jeyavishnu Spintex (P) Ltd	2.01	500	1170	N 10 ⁰ 41' 30.9	E 077 ⁰ 23' 28.9
C098	JVS Export	2.01	230	520	N 10 43.12	E 077 22.49
C098	JVS Export	2.02	230	520	N 10 43.7	E 077 22.49
C098	JVS Export	2.03	800	1735	N 08 56.45	E 077 28.58
C098	JVS Export	2.04	800	1665	N 08 57.9	E 077 28.49
C099	K. Paramasivam	2.01	225	2162	N 08 ⁰ 09' 47"	E 077 ⁰ 33' 49"
C100	K. Seyad Abdul Kareem	2.01	225	1004	N 08 19 56.36	E 077 33 18.84
C101	K. Yoosuf Meeran	2.01	225	1003	N 08 19 01.56	E 077 33 19.64
C102	K.M.Knitwear	2.01	250	1231	N 10 ⁰ 41' 35.3	E 077 ⁰ 23' 55.6
C102	K.M.Knitwear	2.02	250	1463	N 10 ⁰ 41' 176	E 077 ⁰ 23' 218
C103	K.S. Kamalakannan	2.01	225	1158	N 08 19' 56.10"	E 077 34' 04.32"
C104	K.S.R. Textile Mills (P) Ltd	2.01	800	1040	N 07 67 13.9	E 011 83 70.1
C104	K.S.R. Textile Mills (P) Ltd	2.02	800	1040	N 07 67 28.5	E 011 83 50.0
C105	K.T.V. Oil Mills	2.01	1650	1418	N 08 ⁰ 58'	E 077 ⁰ 28' 99.6"



CDM – Executive Board

page 64

					23.9"	
C105	K.T.V. Oil Mills	2.02	1650	1419	N 08° 58' 95.6"	E 077° 28' 55.4"
C105	K.T.V. Oil Mills	2.03	1650	1444	N 08° 57' 94.3"	E 077 29' 00.3"
C105	K.T.V. Oil Mills	2.04	1650	2429	N 08 18 97.6	E 077 40 89.0
C105	K.T.V. Oil Mills	2.05	1650	2430	N 08 19 31.6	E 077 40 54.7
C106	Kamachi Steels Ltd	2.01	600	1132	N 09 15 33.2	E 079 01 69.9
C106	Kamachi Steels Ltd	2.02	600	1132	N 09 15 12.4	E 079 16 70.8
C107	Kandagiri Spinning Mills Ltd	2.01	1250	1404	N 08 13 49.2	E 077 41 47.2
C107	Kandagiri Spinning Mills Ltd	2.02	1250	1405	N 08 14 28.2	E 077 41 11.2
C107	Kandagiri Spinning Mills Ltd	2.03	1250	2004	N 09 00 38.6	E 077 32 29.0
C108	Kannammal	2.01	250	489	N 10 82 54.0	E 077 18 59.5
C109	Karthi Rice Mill	2.01	350	334	N 10 56 06.0	E 077 05 21.9
C110	Kaveri Bio Proteins (P) Ltd	2.01	225	1742	N 08° 12 03.5	E 077° 33 59
C111	Kavery Textiles	2.01	225	1110	N 10 43 58.9	E 077 21 27.4
C112	Kavin Hospital	2.01	225	1296	N 08° 12' 04"	E 077° 35' 35"
C113	Kavitha Dyeings	2.01	225	707	N 08° 11' 44"	E 077° 34' 38"
C113	Kavitha Dyeings	2.02	225	1278	N 08° 11'	E 077° 29'
C113	Kavitha Dyeings	2.03	250	1877	N 08° 12' 15"	E 077° 35' 35"
C114	Kayaar Exports (P) Ltd	2.01	1650	1292	N 10 38 85.4	E 077 10 91.8
C115	Kesharinandan Knit Fabrics (P) Ltd.,	2.01	750	1519	N 08 57 16.2	E 077 29 25.3
C115	Kesharinandan Knit Fabrics (P) Ltd.,	2.02	750	669	N 10 35 41.2	E 077 10 23.7
C116	Kevi Textiles Clothing Company	2.01	250	1277	N 10 75 95.1	E 077 37 01.6
C117	Kiwi Cottspin Mills (P) Ltd	2.01	750	1727	N 08 59 00.6	E 077 26 08.4
C118	Kongarar Cotton & Synthetics Ltd	2.01	750	2246	N 09 00 38.8	E 077 26 41.4
C119	Krishna Poly Packs (P) Ltd	2.01	750	1753	N 08 59 02.7	E 077 30 47.2
C119	Krishna Poly Packs (P) Ltd	2.02	750	2120	N 09 01 15.6	E 077 31 35.5
C120	Krishna Squeezer & Dryer Ltd	2.01	350	1391	N 10 35 31.8	E 077 18 46.5



CDM – Executive Board

page 65

C121	Kutti Spinners (P) Ltd.,	2.01	350	1644	N 08 11 09.8	E 077 37 26.6
C121	Kutti Spinners (P) Ltd.,	2.02	1250	2220	N 08 ⁰ 59' 39.8"	E 077 ⁰ 33' 12.9"
C122	L.G.Balakrishnan & Bros Ltd	2.01	850	615	N 10 91 04.9	E 077 30 36.8
C122	L.G.Balakrishnan & Bros Ltd	2.02	500	1475	N 09 ⁰ 02' 21.8"	E 077 ⁰ 21' 46.1"
C122	L.G.Balakrishnan & Bros Ltd	2.03	500	1476	N 09 ⁰ 02' 37.1"	E 077 ⁰ 21' 36.9"
C123	L.K.Textiles (P) Ltd	2.01	600	699	N 07 84 79.3	E 090 33 60.7
C123	L.K.Textiles (P) Ltd	2.02	330	827	N 07 59 55.7	E 011 88 97.0
C124	Lakshmi Saraswathi Cotton Mills Pvt. Ltd	2.01	500	1432	N 09 ⁰ 00' 14.2"	E 077 ⁰ 17' 26.2"
C125	Lakshmi Spinners	2.01	750	1096	N 10 42 36	E 078 28 28.38
C126	Lawn Textile Mills (P) Ltd	2.01	225	1031	N 10 ⁰ 44' 32.6"	E 077 ⁰ 21' 10.6"
C126	Lawn Textile Mills (P) Ltd	2.02	225	1031	N 10 ⁰ 44' 23.3"	E 077 ⁰ 21' 05.8"
C126	Lawn Textile Mills (P) Ltd	2.03	225	1031	N 10 ⁰ 44' 35.8"	E 077 ⁰ 21' 16.5"
C126	Lawn Textile Mills (P) Ltd	2.04	225	1031	N 10 ⁰ 44' 14.8"	E 077 ⁰ 21' 05.5"
C126	Lawn Textile Mills (P) Ltd	2.05	225	1031	N 10 ⁰ 44' 26.9"	E 077 ⁰ 21' 25.5"
C127	Leeds Spinning Mills Pvt. Ltd	2.01	250	1321	N 10 75 88.3	E 077 35 79.3
C127	Leeds Spinning Mills Pvt. Ltd	2.02	250	1322	N 10 76 00.6	E 077 35 82.0
C127	Leeds Spinning Mills Pvt. Ltd	2.03	250	1323	N 10 76 12.0	E 077 35. 85.7
C128	LGB Auto Products Ltd	2.01	500	1477	N 09 ⁰ 02' 54.8"	E 077 ⁰ 21' 42.4"
C129	M. Ponnusamy	2.01	225	2111	N 08 ⁰ 10' 16"	E 077 ⁰ 35' 02"
C130	M. Thiagarajan (Sree Meenakshisundaram Textiles)	2.01	750	1729	N 08 59 55.1	E 077 26 03.7
C131	M.P. Creation	2.01	250	1293	N 10 75 56.3	E 077 36 97.9
C132	M.R. Agency	2.01	250	358	N 10 92 72.2"	E 077 14 41.8
C132	M.R. Agency	2.02	250	1387	N 10 75 04.6"	E 077 35 20.4



CDM – Executive Board

page 66

C133	M.T.A. Mills (P) Ltd	2.01	350	2168	N 08 17 59.5	E 077 36 32.5
C134	Magna Electro Castings Ltd	2.01	750	476	N 10 35 24.6	E 077 08 26.8
C134	Magna Electro Castings Ltd	2.02	1650	859	N 10 36 11.0	E 077 12 45.7
C135	Mahalakshmi Textiles	2.01	225	725	N 10° 39' 29.8"	E 077° 20' 93.6"
C136	Maharaja Modern Rice Mill	2.01	350	465	N 10 55 42.4	E 077 05 52.2
C137	Mallow International	2.01	250	971	N 10 44 38.5	E 077 21 25.1
C137	Mallow International	2.02	350	1097	N 10 35 53.7	E 077 18 52.4
C137	Mallow International	2.03	350	1370	N 10 36 00.5	E 077 17 14.4
C138	Mallur Siddeswara Spinning Mills (P) Ltd	2.01	1650	1682	N 08 57 33.1	E 077 26 59.7
C139	Mani Spinning Mills (P) Ltd	2.01	1250	1703	N 08 14° 36.9'	E 077 41° 38.5'
C139	Mani Spinning Mills (P) Ltd	2.02	1250	1704	N 08 14° 37.9'	E 077 41° 23.4'
C140	Maple Overseas (P) Ltd	2.01	225	1878	N 08° 11' 41.49"	E 077° 38' 14.29"
C141	Meera Textiles (P) Ltd	2.01	1250	1669	N 08 10 56.0	E 077 39 08.4
C142	Metro Fabrics	2.01	225	1252	N 08° 13' 37.94"	E 077° 36' 36.01"
C143	Mithun Wind Farms	2.01	225	1452	N 10° 38' 31.0"	E 077° 18' 34.8"
C144	Moon Spinners Ltd	2.01	500	1599	N 08 17 20.42	E 077 42 14.19
C145	Motley Wrenchyarn (P) Ltd	2.01	350	1379	N 10 36 05.8	E 077 19 09.2
C146	Mountain Spinning Mills Ltd	2.01	500	1750	N 08° 15' 35.3"	E 077° 44' 17.9"
C147	MSS Spinners Pvt Ltd	2.01	750	1752	N 08 58 31.9	E 077 29 49.1
C148	Murugan Textiles	2.01	500	404	N 10 54' 55.1"	E 077 09' 17.8"
C148	Murugan Textiles	2.02	500	540	N 10 56' 45.5"	E 077 13' 38.2"
C148	Murugan Textiles	2.03	500	541	N 10 56' 38.7"	E 077 13' 16.3"
C149	Muthu Export House	2.01	500	1583	N 09° 01' 56.0"	E 077° 22' 11.5"



CDM – Executive Board

page 67

C150	Muthuraam Poly Spin	2.01	250	1175	N 10 76 12.6	E 077 36 80.7
C150	Muthuraam Poly Spin	2.02	225	2383	N 08 20 44.5'	E 077 35 64.5"
C150	Muthuraam Poly Spin	2.03	225	2383	N 08 20 35.7"	E 077 35 71.2"
C151	N.R.U Spinning Mills Ltd	2.01	750	2127	N 09 01 48.9	E 077 24 27.2
C152	N.S.P.Knitting Mills	2.01	500	1074	N 08 ⁰ 59' 33.2"	E 077 ⁰ 19' 02.6"
C152	N.S.P.Knitting Mills	2.02	500	1105	N 08 ⁰ 58' 51.2"	E 077 ⁰ 19' 04.5"
C152	N.S.P.Knitting Mills	2.03	500	331	N 08 ⁰ 42' 330"	E 077 ⁰ 21' 500"
C152	N.S.P.Knitting Mills	2.04	500	330	N 08 ⁰ 42' 392"	E 077 ⁰ 21' 684"
C153	N.S.P.Tex	2.01	750	875	N 10 ⁰ 41.361	E 077 ⁰ 25.797
C154	Naga Limited	2.01	800	900	N 07 67 86.9	E 011 85 64.6
C154	Naga Limited	2.02	800	899	N 07 68 37.5	E 011 86 13.1
C155	Nanco Hosiery Mills	2.01	225	817	N 10 ⁰ 43' 53.6"	E 077 ⁰ 18' 47.9"
C155	Nanco Hosiery Mills	2.02	225	817	N 10 ⁰ 43' 57.9"	E 077 ⁰ 18' 47.9"
C156	Nandhi Spinning Mill (P) Ltd	2.01	250	1108	N 10 ⁰ 45 14.3"	E 077 ⁰ 22 35 .8"
C157	Neeraj Enterprises (P) Ltd.,	2.01	250	492	N 10 92 25.9	E 077 25 56.6
C158	Nelsun Paper Mills Ltd	2.01	750	1539	N 08 59 00.5	E 077 22 26.9
C159	NIF Wind Energy India Pvt Ltd	2.01	250	849	N 10 41 32.8	E 077 20 44.7
C159	NIF Wind Energy India Pvt Ltd	2.02	250	848	N 10 41 30.6	E 077 20 39.5
C160	Nilgiri Textiles Pvt Limited	2.01	800	1049	N 07 68 89.6	E 011 82 40.8
C161	P. Mohan	2.01	225	2019	N 08 ⁰ 10' 26"	E 077 ⁰ 34' 27"
C162	P. Palanivel	2.01	225	2143	N 08 ⁰ 11' 10"	E 077 ⁰ 35' 16"
C163	P.K.P.Processors	2.01	250	530	N 10 94 95.9	E 077 26 54.87
C164	P.S.K. Textiles India Pvt Ltd	2.01	250	2349	N 08 ⁰ 08' 40.13"	E 077 ⁰ 34' 50.14"
C164	P.S.K. Textiles India Pvt Ltd	2.02	250	2349	N 08 ⁰ 08' 52.89"	E 077 ⁰ 34' 50.48"
C165	P.S.K.Engineering Construction & Co	2.01	350	1776	N 08 11 35.2	E 077 36 17.6



CDM – Executive Board

page 68

C166	Palaniappa Textiles (P) Ltd	2.01	750	1784	N 08 59 20.5	E 077 27 24.5
C167	Pallava Textiles Ltd	2.01	750	1402	N 08 09 73.9	E 077 33 25.4
C167	Pallava Textiles Ltd	2.02	750	2014	N 09 02 23.5	E 077 25 10.4
C168	Pallipalayam Spinners (P) Ltd	2.01	750	1968	N 08 10 73.8	E 077 33 12.0
C169	Pandian Textile Mills (P) Ltd	2.01	1250	1889	N 08 10 04.0	E 077 38 44.3
C170	Parani Spinning Mills Pvt Ltd.,	2.01	1250	1334	N 08 11 15.5	E 077 38 48.9
C171	Pariyur Amman Spinning Mills Ltd	2.01	750	1910	N 08 16 17.2	E 077 37 60.6
C172	Parvathy Dyeing	2.01	500	547	N 07 49 88	E 012 11 71.6
C173	Pavai Alloys & Steels Pvt Ltd.,	2.01	330	1033	N 07 59 79.9	E 011 88 71.1
C174	Pavathal Spinning Mills (P) Ltd	2.01	250	1474	N 10 77 35.2	E 077 39 01.9
C175	Pioneer Woven Sacks (P) Ltd	2.01	225	351	N 10 ⁰ 41 54.0	E 077 ⁰ 21 8.3
C175	Pioneer Woven Sacks (P) Ltd	2.02	225	525	N 10 ⁰ 55 28.6	E 077 ⁰ 15 11.0
C175	Pioneer Woven Sacks (P) Ltd	2.03	225	525	N 10 ⁰ 42 15.3	E 077 ⁰ 20 55.5
C176	Plant Lipids (P) Ltd	2.01	600	1577	N 08 ⁰ 18' 33.5"	E 077 ⁰ 40' 22.5"
C176	Plant Lipids (P) Ltd	2.02	600	1578	N 08 ⁰ 18' 25.6"	E 077 ⁰ 40' 23.0"
C176	Plant Lipids (P) Ltd	2.03	600	1579	N 08 ⁰ 18' 29.8"	E 077 ⁰ 40' 33.1"
C176	Plant Lipids (P) Ltd	2.04	600	1580	N 08 ⁰ 18' 21.6"	E 077 ⁰ 40' 32.4"
C176	Plant Lipids (P) Ltd	2.05	600	2064	N 08 ⁰ 24' 14"	E 077 ⁰ 33' 57"
C176	Plant Lipids (P) Ltd	2.06	600	2035	N 08 ⁰ 23' 57"	E 077 ⁰ 34' 45"
C176	Plant Lipids (P) Ltd	2.07	600	2036	N 08 ⁰ 24' 12"	E 077 ⁰ 34' 39"
C177	Pon Pure Chem (P) Ltd	2.01	250	2034	N 08 ⁰ 11' 08.13"	E 077 ⁰ 36' 27.19"
C177	Pon Pure Chem (P) Ltd	2.02	250	2077	N 08 ⁰ 12' 24.23"	E 077 ⁰ 36' 29.88"
C177	Pon Pure Chem (P) Ltd	2.03	250	2078	N 08 ⁰ 12' 24.01"	E 077 ⁰ 36' 29.66"
C178	Poppys Knitwear (P) Ltd	2.01	850	1452	N 08 ⁰ 18 86.5	E 077 ⁰ 37 23.3



CDM – Executive Board

page 69

C178	Poppys Knitwear (P) Ltd	2.02	850	1751	N 08° 18 73.9	E 077° 37 16.4
C178	Poppys Knitwear (P) Ltd	2.03	850	1806	N 08° 09 85.8	E 077° 37 50.6
C178	Poppys Knitwear (P) Ltd	2.04	850	2350	N 08° 17 81.5	E 077° 37 20.9
C178	Poppys Knitwear (P) Ltd	2.05	850	2351	N 08° 18 27.7	E 077° 36 97.6
C178	Poppys Knitwear (P) Ltd	2.06	1250	2502	N 08° 13 32.4	E 077° 41 32.5
C178	Poppys Knitwear (P) Ltd	2.07	850	576	N 10° 93 51.3	E 077° 30 10.1
C178	Poppys Knitwear (P) Ltd	2.08	850	577	N 10° 93 08.5	E 077° 28 08.2
C178	Poppys Knitwear (P) Ltd	2.09	850	578	N 10° 92 77.4	E 077° 29 15.6
C179	Power Link System (P) Ltd	2.01	230	518	N 11 85 07.0	E 075 98 06
C179	Power Link System (P) Ltd	2.02	330	1157	N 11 85 81.1	E 076 26 12
C180	Power Spinning Mills	2.01	225	839	N 10 43' 18.1	E 077 23' 05.0
C180	Power Spinning Mills	2.02	225	839	N 10 43' 23.0	E 077 23' 05.06
C181	Prabath Mills	2.01	500	622	N 07 62 03.3	E 011 81 79.3
C182	Prabha Engineers	2.01	500	1793	N 09 03' 02.7"	E 077 23' 23.7"
C182	Prabha Engineers	2.02	600	2213	N 09 00' 23.6"	E 077 25' 02.1"
C182	Prabha Engineers	2.03	600	2214	N 09 00' 25.2"	E 077 24' 50.0"
C182	Prabha Engineers	2.04	600	2283	N 09 00' 38.6"	E 077 26' 21.3"
C183	Prabhu Spinning Mills (P) Ltd	2.01	1650	1284	N 10 58 86	E 077 21 98
C184	Prabhu Spinning Mills (P) Ltd	2.01	1650	1159	N 10 59 45	E 077 33 61
C185	Prachidhi Spinners Pvt Ltd	2.01	750	1074	N 10 38 13.0	E 077 09 01.8
C185	Prachidhi Spinners Pvt Ltd	2.02	750	773	N 10 38 16.5	E 077 08 50.1
C186	Prassanna Spinning Mills	2.01	250	478	N 10 94 05.3	E 077 25 84.2
C186	Prassanna Spinning Mills	2.02	250	479	N 10 94 14.1	E 077 25 66.4



CDM – Executive Board

page 70

C186	Prassanna Spinning Mills	2.03	250	480	N 10 94 10.0	E 077 25 48.4
C186	Prassanna Spinning Mills	2.04	250	481	N 10 94 20.9	E 077 25 31.6
C187	Praveen Seeds Pvt. Ltd.,	2.01	250	1109	N 10 ⁰ 45 07.6'	E 077 ⁰ 22 36.7'
C188	Precision Equipments (Chennai) (P) Ltd	2.01	250	513	N 10 95 22.6	E 077 26 37.5
C188	Precision Equipments (Chennai) (P) Ltd	2.02	250	514	N 10 95 12.7	E 077.26354
C189	Precision Machine & Auto Components (P) Ltd	2.01	250	512	N 10 95 09.7	E 077 26 51.7
C190	Premdurai Spinning Mills (P) Ltd	2.01	600	556	N 10 56 13.8"	E 077 14 36.0"
C190	Premdurai Spinning Mills (P) Ltd	2.02	600	557	N 10 56 04.2"	E 077 14 30.7"
C190	Premdurai Spinning Mills (P) Ltd	2.03	600	558	N 10 56' 16.1"	E 077 14' 28.4"
C191	Pressmatic Engineers	2.01	330	810	N 07 59 31.4	E 011 88 52.1
C192	Prime Wind Energy Company	2.01	250	670	N 10 ⁰ 55 53.3'	E 077 ⁰ 18 66.8'
C193	Purani Textiles Pvt Ltd	2.01	600	812	N 07 85 78.6	E 092 04 30.211
C194	Pushpak Precision Industries Pvt Ltd	2.01	250	671	N 10 ⁰ 55 62.3'	E 077 ⁰ 18 76.1'
C195	PVRSM Broilers & Hatcheries (P) Ltd	2.01	250	1798	N 08 12 39.3	E 077 39 20.7
C195	PVRSM Broilers & Hatcheries (P) Ltd	2.02	250	1879	N 08 12 39.1	E 077 39 20.9
C196	R.G. Selvarathi Coolie Mills	2.01	350	346	N 10 55 42.7	E 077 05 31.9
C197	R.M.P. Farms	2.01	250	531	N 10 94 83.6	E 077 26 85.5
C198	R.N. Polysacks (P) Ltd	2.01	225	655	N 10 ⁰ 44 90.3	E 077 ⁰ 22 50.9
C199	Raghav Industries Ltd	2.01	1250	1645	N 08 56 01.1	E 077 40 11.3
C200	Raju & Co	2.01	500	1309	N 08 14' 41"	E 077 36' 15"



CDM – Executive Board

page 71

C201	Raju Spinning Mills (P) Ltd	2.01	1250	886	N 08 56 11.8	E 077 39 39.4
C201	Raju Spinning Mills (P) Ltd	2.02	1250	887	N 08 55 49.9	E 077 40 00.1
C201	Raju Spinning Mills (P) Ltd	2.03	1250	1941	N 08 59 27.5	E 077 33 03.5
C201	Raju Spinning Mills (P) Ltd	2.04	1250	1942	N 08 59 39.0	E 077 32 38.2
C202	Rakhava Impex	2.01	250	637	N 10 72 91.9	E 077 38 09.3
C202	Rakhava Impex	2.02	250	724	N 10 74 85.3	E 077 38 82.0
C203	Ran India Steels (P) Ltd	2.01	1250	1127	N 08 11 09.2	E 077 38 27.5
C203	Ran India Steels (P) Ltd	2.02	1250	1149	N 08 10 45.9	E 077 38 14.4
C203	Ran India Steels (P) Ltd	2.03	1250	1339	N 08 13 38.9	E 077 41 11.9
C203	Ran India Steels (P) Ltd	2.04	1250	1368	N 08 11 03.7	E 077 37 55.0
C203	Ran India Steels (P) Ltd	2.05	1250	1399	N 08 13 06.6	E 077 42 02.3
C203	Ran India Steels (P) Ltd	2.06	1250	1421	N 08 13 49.8	E 077 41 12.3
C204	Rasi Seeds Pvt Ltd.,	2.01	1250	1400	N 08 13 44.4	E 077 42 17.6
C204	Rasi Seeds Pvt Ltd.,	2.02	1250	1401	N 08 14 00.4	E 077 42 45.0
C204	Rasi Seeds Pvt Ltd.,	2.03	1250	1403	N 08 14 06.9	E 077 42 29.4
C204	Rasi Seeds Pvt Ltd.,	2.04	1250	1424	N 08 10 03.7	E 077 39 00.6
C204	Rasi Seeds Pvt Ltd.,	2.05	1250	1433	N 08 10 37.4	E 077 38 20.5
C204	Rasi Seeds Pvt Ltd.,	2.06	1250	1438	N 08 13 04.6	E 077 43 06.8
C204	Rasi Seeds Pvt Ltd.,	2.07	1250	1456	N 08 13 42.2	E 077 42 58.9
C204	Rasi Seeds Pvt Ltd.,	2.08	1250	1492	N 08 13 16.5	E 077 43 20.9
C205	Rathnagiri Impex Pvt Ltd	2.01	750	1732	N 08 59 55.0	E 077 26 26.5
C206	RBR Garments	2.01	225	541	N 10 44' 23.1"	E 077 23' 64.9"
C206	RBR Garments	2.02	225	541	N 10 44' 15"	E 077 23' 67.6"
C207	Rogini Mills	2.01	225	1185	N 10° 37' 07.9"	E 077° 18' 05.6"
C207	Rogini Mills	2.02	225	1185	N 10° 37' 00.7"	E 077° 18' 00.3"
C207	Rogini Mills	2.03	225	1185	N 10° 37' 05.7"	E 077° 17' 05.6"
C207	Rogini Mills	2.04	225	1185	N 10° 37' 07.9"	E 077° 18' 05.6"
C207	Rogini Mills	2.05	225	1185	N 10° 37' 07.9"	E 077° 18' 05.6"
C207	Rogini Mills	2.06	225	1185	N 10° 37' 07.9"	E 077° 18' 05.6"
C207	Rogini Mills	2.07	225	1186	N 10° 36' 59.6"	E 077° 17' 40.9"
C207	Rogini Mills	2.08	225	1208	N 10° 36' 51.2"	E 077° 17' 47.0"



CDM – Executive Board

page 72

C207	Rogini Mills	2.09	225	1345	N 10° 36' 51.4"	E 077° 18' 12.6"
C207	Rogini Mills	2.10	225	1208	N 10° 36' 56.2"	E 077° 17' 46.5"
C207	Rogini Mills	2.11	225	1318	N 10° 36' 58.1"	E 077° 18' 05.6"
C207	Rogini Mills	2.12	225	1318	N 10° 36' 53.8"	E 077° 18' 01.8"
C208	RRD Tex (P) Ltd	2.01	1250	1455	N 08 14 19.6	E 077 40 56.8
C208	RRD Tex (P) Ltd	2.02	1250	1453	N 08 14 08.8	E 077 40 36.4
C208	RRD Tex (P) Ltd	2.03	1250	1451	N 08 14 58.0	E 077 41 41.1
C209	S. Balakrishnan	2.01	225	1238	N 10° 38' 29.9"	E 077° 18' 41.0"
C210	S. Ganthimathi	2.01	250	486	N 10 82 56.5	E 077 18 60.0
C211	S. Muthusamy	2.01	225	2145	N 08° 13' 02"	E 077° 32' 52"
C212	S. Natarajan	2.01	225	2150	N 08° 11' 56"	E 077° 33' 50"
C213	S.G. Associates	2.01	225	669	N 10 94 34.1	E 077 30 32.2
C213	S.G. Associates	2.02	250	562	N 10 92 41.1	E 077 13 87.2
C214	S.K. Nallusamy	2.01	250	1612	N 08° 09.943	E 077° 34 11.5
C215	S.K.T. Textile Mills	2.01	350	2202	N 08 18 18.6	E 077 36 40.6
C215	S.K.T. Textile Mills	2.02	350	1332	N 10 36 35.3	E 077 18 02.3
C216	S.P. Apparels Ltd	2.01	800	1078	N 11 85 26.4	E 076 90 80
C216	S.P. Apparels Ltd	2.02	800	1079	N 11 85 60.2	E 076 92 80
C216	S.P. Apparels Ltd	2.03	330	1107	N 11 88 43.9	E 075 95 49
C216	S.P. Apparels Ltd	2.04	330	1181	N 11 88 87.8	E 075 93 10
C217	S.P. Superfine Cotton Mills (P) Ltd	2.01	1250	1658	N 08 10 19.5	E 077 38 38.9
C217	S.P. Superfine Cotton Mills (P) Ltd	2.02	1250	1714	N 08 14 19.6	E 077 40.56.8
C218	Sabari Exim (P) Ltd	2.01	600	1050	N 07 89 95.2	E 090 99 96.20
C218	Sabari Exim (P) Ltd	2.02	600	1051	N 07 89 93.8	E 090 98 03.29
C219	Sabari Jewellery	2.01	225	576	N 10° 41' 18.4"	E 077° 19' 17.2"
C220	Sakthi Animal Feeds	2.01	250	1166	N 10 75 53.8	E 077 37 08.1
C221	Sakthi Murugan Agro Foods Ltd	2.01	250	1173	N 10 74 91.0	E 077 36 72.6
C221	Sakthi Murugan Agro Foods Ltd	2.02	250	1173	N 10 75 05.0	E 077 36 72.1
C222	Sakthi Murugan Roller Flour Mills Ltd	2.01	250	1172	N 10 74 97.8	E 077 36 89.9
C222	Sakthi Murugan Roller Flour Mills Ltd	2.02	250	1172	N 10 75 12.2	E 077 36 90.9
C223	Sakthi Murugan Wind Farm (P) Ltd	2.01	250	1254	N 10 75 58.9	E 077 36 63.6



CDM – Executive Board

page 73

C223	Sakthi Murugan Wind Farm (P) Ltd	2.02	250	1254	N 10 75 72.0	E 077 36 64.9
C224	Sakthi Poultry Farm	2.01	225	2112	N 08 15 42.5'	E 077 35 18.9
C224	Sakthi Poultry Farm	2.02	225	2146	N 08 14 97.2'	E 077 35 16 .40
C225	Sakthidaran Spintex Mills (P) Ltd	2.01	1250	1185	N 08 10 29.9	E 077 38 50.6
C226	Sakthivelu Poly Pack	2.01	225	545	N 10 ⁰ 41 58.4	E 077 ⁰ 21 8.8
C227	Salem Polypacks Ltd	2.01	225	2110	N 08 ⁰ 15' 48.56"	E 077 ⁰ 34' 13.84"
C228	Samba Publishing Co.(P) Ltd	2.01	800	1734	N 07 73 41.2	E 098 95 29
C229	Sambandam Mills	2.01	600	698	N 07 84 80.6	E 090 35 86.5
C230	Sambandam Spinning Mills Ltd	2.01	1250	1371	N 08 13 38.7	E 077 41 48.6
C230	Sambandam Spinning Mills Ltd	2.02	1250	1382	N 08 13 46.1	E 077 41 25.6
C230	Sambandam Spinning Mills Ltd	2.03	1250	1995	N 08 58 51.9	E 077 33 14.2
C230	Sambandam Spinning Mills Ltd	2.04	1250	2022	N 09 00 34.9	E 077 33 07.4
C230	Sambandam Spinning Mills Ltd	2.05	1250	2023	N 08 59 21.2	E 077 31 22.4
C231	Sanjeevi Wind Mills	2.01	250	1174	N 10 73 40.2	E 077 37 45.4
C232	Santha Spinning and Weaving Mills Pvt Ltd	2.01	1250	1346	N 08 10 53.5	E 077 36 39.4
C233	Santhi Casting Works	2.01	500	894	N 08 ⁰ 14' 08"	E 077 ⁰ 36' 20"
C233	Santhi Casting Works	2.02	500	1803	N 08 ⁰ 24' 51"	E 077 ⁰ 33' 55"
C233	Santhi Casting Works	2.03	500	895	N 08 ⁰ 14' 15"	E 077 ⁰ 35' 52"
C234	Santhosh Textile Process	2.01	600	660	N 10 56 007	E 077 20 36.4
C234	Santhosh Textile Process	2.02	225	631	N 10 55 44.6	E 077 17 18.4
C234	Santhosh Textile Process	2.03	225	632	N 10 55 41.5	E 077 17 29.3



C235	Saradhambika Paper & Board Mills (P) Ltd	2.01	750	861	N 10 42 65.2	E 077 29 38.7
C236	Saran Garments	2.01	850	1175	N 08 10 33.5	E 077 36 23.0
C237	Saran Knit Wear	2.01	225	455	N 10 92 48.1	E 077 13 91.2
C238	Scientific MES-Technik (P) Ltd	2.01	600	1857	N 09 ⁰ 00' 30.2"	E 077 ⁰ 17' 09.0
C239	Seethalakshmi Textiles	2.01	250	1168	N 10 76 00.4	E 077 36 85.0
C240	Selvaganapathy Cotton Mills (P) Ltd	2.01	500	721	N 08 ⁰ 09 52.5'	E 077 ⁰ 33 97.9'
C240	Selvaganapathy Cotton Mills (P) Ltd	2.02	500	1272	N 08 ⁰ 09 67.1'	E 077 ⁰ 33 60.7'
C241	Selvam Traders	2.01	225	432	N 10 ⁰ 43 6"	E 077 ⁰ 310"
C241	Selvam Traders	2.02	225	500	N 10 ⁰ 436"	E 077 ⁰ 310"
C241	Selvam Traders	2.03	225	890	N 10 ⁰ 436"	E 077 ⁰ 310"
C242	Selvi Spinning Mill	2.01	750	1594	N 08 58 49.5	E 077 27 16.4
C243	Senbagam Textiles and Spinners	2.01	250	1271	N 10 ⁰ 38" 26.9"	E 077 ⁰ 18' 47.4"
C244	Sengunthar Mills (P) Ltd	2.01	1250	1623	N 08 59 49.7	E 077 31 56.3
C245	Seyad Cotton Mills Limited	2.01	500	1328	N 08 19 44.69	E 077 33 18.18
C245	Seyad Cotton Mills Limited	2.02	500	1484	N 08 19 40.89	E 077 34 13.53
C245	Seyad Cotton Mills Limited	2.03	500	1614	N 08 18 08.30	E 077 42 20.37
C246	Seyad Home Industries Pvt Ltd	2.01	500	875	N 08 19 50.58	E 077 33 25.93
C246	Seyad Home Industries Pvt Ltd	2.02	225	1155	N 08 19 54.92	E 077 34 11.77
C247	Seyad Shariat Finance Limited	2.01	225	1447	N 08 12 23.76	E 077 34 05.59
C247	Seyad Shariat Finance Limited	2.02	225	1572	N 08 20 01.48	E 077 34 12.23
C247	Seyad Shariat Finance Limited	2.03	225	2114	N 08 19 58.59	E 077 34 57.89
C247	Seyad Shariat Finance Limited	2.04	225	753	N 08 ⁰ 13' 11.84"	E 077 ⁰ 34' 17.06"
C248	Seyadu Beedi Company	2.01	500	1598	N 08 17 50.03	E 077 42 02.32
C249	Shah Dilip Ghisalal	2.01	330	1223	N 07 69 50.0	E 011 85 40.2



CDM – Executive Board

page 75

C250	Shakthi Murugan Textiles	2.01	750	1681	N 08 58 72.7	E 077 27 06 .8
C251	Shambhu Vengu & Co.	2.01	225	1476	N 08 ⁰ 37' 05.2"	E 077 ⁰ 18' 55.2"
C252	Shambhu Vengu Spinning Mills (P) Ltd	2.01	500	1603	N 08 ⁰ 59' 3"	E 077 ⁰ 17' 34.6"
C253	Shanmugam Powerr Looms	2.01	225	1293	N 08 ⁰ 14'33.38"	E 077 ⁰ 35'44.51"
C253	Shanmugam Powerr Looms	2.02	250	2063	N 08 ⁰ 14'28.26"	E 077 ⁰ 35'38.24"
C253	Shanmugam Powerr Looms	2.03	250	2340	N 08 ⁰ 14'00.77"	E 077 ⁰ 35'53.12"
C254	Sharp Engineers	2.01	500	550	N 10 57' 14.5"	E 077 13' 19.3"
C254	Sharp Engineers	2.02	500	551	N 10 57 20.1"	E 077 13' 13.3"
C254	Sharp Engineers	2.03	600	587	N 10 56' 23.6"	E 077 12' 45.6
C254	Sharp Engineers	2.04	600	588	N 10 56' 41.3"	E 077 12' 41.8"
C255	Shenthur Alloys Foundry	2.01	350	2196	N 08 18 12.1	E 077 36 25.6
C256	Shiner Sacks Pvt Ltd	2.01	225	2051	N 08 ⁰ 15' 52.66"	E 077 ⁰ 34' 12.73"
C257	Shiva Cargo Movers Ltd	2.01	225	392	N 07 39 54.9	E 120 85 72
C257	Shiva Cargo Movers Ltd	2.02	225	392	N 07 39 50.7	E 120 86 13
C258	Shiva Tex Yarn Ltd	2.01	225	443	N 07 39 35.5	E 120 84 66
C258	Shiva Tex Yarn Ltd	2.02	225	443	N 07 39 44.6	E 120 83 40
C258	Shiva Tex Yarn Ltd	2.03	225	440	N 07 35 60.6	E 120 26 42
C258	Shiva Tex Yarn Ltd	2.04	225	440	N 07 35 41.0	E 120 26 32
C258	Shiva Tex Yarn Ltd	2.05	225	440	N 07 35 42.6	E 120 24 77
C258	Shiva Tex Yarn Ltd	2.06	225	439	N 07 35 46.1	E 120 23 46
C258	Shiva Tex Yarn Ltd	2.07	225	441	N 07 35 20.2	E 120 25 73
C258	Shiva Tex Yarn Ltd	2.08	225	441	N 07 35 21.9	E 120 23 72
C258	Shiva Tex Yarn Ltd	2.09	225	441	N 07 35 03.4	E 120 20 63
C258	Shiva Tex Yarn Ltd	2.10	225	442	N 07 38 82.9	E 120 51 74
C258	Shiva Tex Yarn Ltd	2.11	225	442	N 07 38 89.8	E 120 50 24
C258	Shiva Tex Yarn Ltd	2.12	225	442	N 07 39 08.5	E 120 53 31
C258	Shiva Tex Yarn Ltd	2.13	225	442	N 07 39 12.9	E 120 51 90
C258	Shiva Tex Yarn Ltd	2.14	225	442	N 07 39 17.8	E 120 50 30
C258	Shiva Tex Yarn Ltd	2.15	225	442	N 07 39 35.6	E 120 51 94
C258	Shiva Tex Yarn Ltd	2.16	225	442	N 07 39 37.3	E 120 50 44



C259	Shree Bharani Spinnings (India) Ltd	2.01	500	1365	N 09° 00' 10.2"	E 077° 17' 14.7"
C260	Shree Malliga Mills Pvt Ltd	2.01	500	953	N 08 55' 38.1	E 077 31 02.4"
C260	Shree Malliga Mills Pvt Ltd	2.02	500	995	N 08 55' 30.6"	E 077 31' 01.0"
C260	Shree Malliga Mills Pvt Ltd	2.03	750	2011	N 09 02' 08.3"	E 077 25' 26.2"
C261	Shreya Power Farm (India) Pvt Ltd	2.01	250	1167	N 10 75 29.9	E 077 36 99.0°
C262	Shri Amman Steel and Alided Industries	2.01	1250	1134	N 08 16 16.3	E 077 39 08.08
C263	Shri Govindaraja Mills Ltd	2.01	750	1341	N 08° 15'52.41"	E 077° 38'54.72"
C263	Shri Govindaraja Mills Ltd	2.02	750	1342	N 08° 15'58.71"	E 077° 38'37.76"
C263	Shri Govindaraja Mills Ltd	2.03	750	1343	N 08° 15'45.20"	E 077° 38'08.20"
C263	Shri Govindaraja Mills Ltd	2.04	750	1344	N 08° 15'36.98"	E 077° 38'11.40"
C263	Shri Govindaraja Mills Ltd	2.05	1650	1984	N 09° 00'38.67"	E 077° 28'50.12"
C264	Shri Hari Process	2.01	225	493	N 10° 52'	E 077° 11'
C265	Shri Hrishikesh Knitters	2.01	250	535	N 10 92 92.0	E 077 31 92.7
C265	Shri Hrishikesh Knitters	2.02	250	622	N 10 92 94.0	E 077 28 59.5
C266	Shri Renuga Soft-X Towels	2.01	500	1431	N 09° 00' 10.2"	E 077° 17'00.6"
C267	Shri Renuga Textiles Ltd	2.01	500	1788	N 09° 02 79.4	E 077° 24 53.4
C267	Shri Renuga Textiles Ltd	2.02	500	1796	N 09 03 16.2	E 077° 23 74.5
C268	Shri Rohith Spinners Pvt Ltd	2.01	500	243	N 08° 09' 35.5"	E 077° 32' 33.9"
C268	Shri Rohith Spinners Pvt Ltd	2.02	500	244	N 08° 09' 35.2"	E 077° 32' 33.9"
C269	Shri Santhosh Meenakshi Textiles	2.01	500	461	N 10 56 08.1	E 077 08 76.2
C269	Shri Santhosh Meenakshi Textiles	2.02	500	460	N 10 56 07.1	E 077 08 96.7



C269	Shri Santhosh Meenakshi Textiles	2.03	500	459	N 10 56 50.8	E 077 09 02.5
C270	Shri Santhosh Meenakshi Textiles Pvt. Ltd	2.01	600	548	N 10 57 01.8	E 077 14 48.4
C271	Shriram City Union Finance Ltd	2.01	250	1066	N 08° 56 67.5'	E 077° 31 13.8'
C271	Shriram City Union Finance Ltd	2.02	250	1066	N 08° 56 92.8'	E 077° 31 10.2'
C271	Shriram City Union Finance Ltd	2.03	250	1066	N 08° 57 00.5'	E 077° 31 12.2'
C271	Shriram City Union Finance Ltd	2.04	250	1067	N 08° 57.063'	E 077° 31.218'
C271	Shriram City Union Finance Ltd	2.05	250	1067	N 08° 57.016'	E 077° 31.218'
C271	Shriram City Union Finance Ltd	2.06	250	1067	N 08° 57.097'	E 077° 31.329'
C271	Shriram City Union Finance Ltd	2.07	250	1068	N 08° 56 89.1'	E 077° 31 21.4'
C271	Shriram City Union Finance Ltd	2.08	250	1068	N 08° 56 89.4'	E 077° 31 31.2'
C271	Shriram City Union Finance Ltd	2.09	250	1068	N 08° 56 97.8'	E 077° 31 33.0'
C271	Shriram City Union Finance Ltd	2.10	250	1156	N 08 57 33.2	E 077° 31 14.9'
C271	Shriram City Union Finance Ltd	2.11	250	1156	N 08 57 33.9	E 077° 31 16.5'
C271	Shriram City Union Finance Ltd	2.12	250	1157	N 08 57 29.2	E 077° 31 03.9'
C271	Shriram City Union Finance Ltd	2.13	250	1157	N 08 57 36.3	E 077 31 04.8
C271	Shriram City Union Finance Ltd	2.14	250	1157	N 08 57 25.1	E 077° 31 14.2'
C271	Shriram City Union Finance Ltd	2.15	250	1264	N 08 57 15.7	E 077° 30 69.0'
C271	Shriram City Union Finance Ltd	2.16	250	1264	N 08 57 23.1	E 077° 30 70.0'
C271	Shriram City Union Finance Ltd	2.17	250	1264	N 08 57 10.7	E 077° 30 78.0'
C271	Shriram City Union Finance Ltd	2.18	250	1265	N 08 57 20.5	E 077° 30 91.4'



CDM – Executive Board

page 78

C271	Shriram City Union Finance Ltd	2.19	250	1265	N 08 57 18.9	E 077° 30 80.3'
C271	Shriram City Union Finance Ltd	2.20	250	1265	N 08 57 27.5	E 077 30 93.0
C272	Shusbindu Manufacturing (P) Ltd	2.01	225	898	N 08° 11'57.92"	E 077° 37' 04.94"
C273	Siddhanatha Textiles Pvt Ltd	2.01	850	1517	N 08° 16.370'	E 077° 36.210'
C274	SJLT Textiles Pvt Ltd	2.01	1650	1755	N 08 56 75.0	E 077 32 83.6
C274	SJLT Textiles Pvt Ltd	2.02	1650	1754	N 08 58 62.0	E 077 31 60.7
C274	SJLT Textiles Pvt Ltd	2.03	750	1055	N 10 42 37.7	E 077 29 43.9
C274	SJLT Textiles Pvt Ltd	2.04	750	1056	N 10 42 23.8	E 077 29 45.7
C275	SJS Granites	2.01	225	1233	N 10 41 71.0	E 077 22 52.8
C275	SJS Granites	2.02	225	1333	N 10 41.682	E 077 22 75.6
C276	Sky International	2.01	225	229	N 08° 14 60.0	E 077° 33 28.1
C277	Sky Weaves	2.01	225	245	N 08° 14 73.9	E 077° 33.460
C277	Sky Weaves	2.02	800	872	N 11 85 07.0	E 076 64 85
C278	Somakannan Textiles	2.01	225	2106	N 08° 16'08.51"	E 077° 34'05.57"
C279	Sornalakshmi Spinning Mills Pvt Ltd	2.01	350	1643	N 08 13 39.8	E 077 37 58.7
C280	Soundararaja Mills Ltd	2.01	1250	1712	N 08 16 15.6	E 077 42 07.3
C280	Soundararaja Mills Ltd	2.02	1250	1678	N 08 16 02.6	E 077 42 17.2
C280	Soundararaja Mills Ltd	2.03	1250	1711	N 08 15 53.8	E 077 41 36.1
C280	Soundararaja Mills Ltd	2.04	1250	1679	N 08 16 03.1	E 077 41 55.6
C280	Soundararaja Mills Ltd	2.05	1250	1845	N 08 15 37.2	E 077 41 50.0
C280	Soundararaja Mills Ltd	2.06	1250	1677	N 08 15 43.6	E 077 42 21.7
C280	Soundararaja Mills Ltd	2.07	1250	1673	N 08 15 27.8	E 077 41 56.3



CDM – Executive Board

page 79

C280	Soundararaja Mills Ltd	2.08	1250	1672	N 08 15 19.9	E 077 41 41.1
C280	Soundararaja Mills Ltd	2.09	1250	1674	N 08 15 274.8	E 077 42 11.4
C280	Soundararaja Mills Ltd	2.10	1250	1710	N 08 15 27.0	E 077 42 48.3
C280	Soundararaja Mills Ltd	2.11	1250	1709	N 08 15 32.3	E 077 42 29.1
C280	Soundararaja Mills Ltd	2.12	1250	1676	N 08 15 23.8	E 077 42 34.5
C280	Soundararaja Mills Ltd	2.13	1250	1708	N 08 15 11.2	E 077 42 36.8
C280	Soundararaja Mills Ltd	2.14	1250	1675	N 08 15 02.6	E 077 42 04.6
C280	Soundararaja Mills Ltd	2.15	1250	1706	N 08 15 04.8	E 077 42 22.3
C280	Soundararaja Mills Ltd	2.16	1250	1707	N 08 15 15.8	E 077 42 19.4
C281	Sree Jagathguru Textiles Mills (P) Ltd	2.01	500	343	N 10 41' 30.1"	E 077 22' 03.1"
C281	Sree Jagathguru Textiles Mills (P) Ltd	2.02	500	344	N 10 41' 26.1"	E 077 22' 14.9"
C281	Sree Jagathguru Textiles Mills (P) Ltd	2.03	500	345	N 10 41' 33.8"	E 077 33' 13.4"
C281	Sree Jagathguru Textiles Mills (P) Ltd	2.04	500	349	N 10 41' 37.9"	E 077 22' 04.2"
C281	Sree Jagathguru Textiles Mills (P) Ltd	2.05	500	451	N 10 42' 0.00"	E 077 22' 42.4"
C281	Sree Jagathguru Textiles Mills (P) Ltd	2.06	225	1111	N 10 ⁰ 44' 14.0"	E 077 ⁰ 21' 08.6"
C281	Sree Jagathguru Textiles Mills (P) Ltd	2.07	225	1112	N 10 ⁰ 44' 09.5"	E 077 ⁰ 21' 10.3"
C281	Sree Jagathguru Textiles Mills (P) Ltd	2.08	225	1124	N 10 ⁰ 44' 20.7"	E 077 ⁰ 21' 13.0"



CDM – Executive Board

page 80

C282	Sree Santhosh Garments	2.01	600	661	N 10 56 00.7	E 077 20 36.4
C282	Sree Santhosh Garments	2.02	600	523	N 10 56 62.6	E 077 13 99.6
C282	Sree Santhosh Garments	2.03	600	524	N 10 56 50.2	E 077 14 00.7
C282	Sree Santhosh Garments	2.04	600	555	N 10 56 01.0	E 077 14 32.0
C282	Sree Santhosh Garments	2.05	225	544	N 10 55 09.0	E 077 16 99.5
C282	Sree Santhosh Garments	2.06	225	545	N 10 55 15.4	E 077 17 01.0
C283	Sri Bagiyalakshmi Spinners	2.01	225	956	N 10 ⁰ 44" 23.3"	E 077 ⁰ 21" 05.8"
C283	Sri Bagiyalakshmi Spinners	2.02	225	957	N 10 ⁰ 44" 32.3"	E 077 ⁰ 21" 05.5"
C284	Sri Balaji Sago & Starch Products	2.01	250	1165	N 10 76 37.8	E 077 37 04.8
C285	Sri Balamurugan Modern Rice Mill	2.01	350	1303	N 10 36 30.4	E 077 19 03.6
C286	Sri Harikumar Textiles (P) Ltd	2.01	250	1503	N 08 56 64.7	E 077 31 71.2'
C287	Sri Krishna Paper Industries	2.01	225	1420	N 10 ⁰ 37' 12.6"	E 077 ⁰ 18' 39.6"
C288	Sri Lakshmi Saraswathi Textiles (Arni) Ltd	2.01	1250	1136	N 08 13 23.7	E 077 42 25.4
C289	Sri Manohar Jewellery	2.01	225	874	N 10 ⁰ 41' 23.3"	E 077 ⁰ 19' 17.3"
C290	Sri Matha Spinning Mills (P) Ltd	2.01	750	1286	N 10 66 74	E 077 18 25
C290	Sri Matha Spinning Mills (P) Ltd	2.02	750	1287	N 10 66 62	E 077 18 70
C291	Sri Muhuntha Paper Boards	2.01	225	1422	N 10 ⁰ 37' 07.9"	E 077 ⁰ 18' 44.1"
C291	Sri Muhuntha Paper Boards	2.02	225	1422	N 10 ⁰ 37' 03.1"	E 077 ⁰ 18' 43.9"
C291	Sri Muhuntha Paper Boards	2.03	225	1421	N 10 ⁰ 36' 58.4"	E 077 ⁰ 18' 43.5"
C292	Sri Palani Murugan Spinning Mills	2.01	250	1296	N 10 76 05.9	E 077 37 93.2



CDM – Executive Board

page 81

C292	Sri Palani Murugan Spinning Mills	2.02	250	1133	N 10 75 24.6	E 077 37 95.5
C292	Sri Palani Murugan Spinning Mills	2.03	250	1133	N 10 75 34.4	E 077 37 34.0
C292	Sri Palani Murugan Spinning Mills	2.04	250	1123	N 10 75 52.7	E 077 38 15.2
C292	Sri Palani Murugan Spinning Mills	2.05	250	1122	N 10 76 25.6	E 077 37 80.4
C292	Sri Palani Murugan Spinning Mills	2.06	250	1280	N 10 76 36.7	E 077 37 78.1
C293	Sri Palaniappa Wind Mill	2.01	225	2125	N 080 11' 15"	E 077° 35' 10"
C293	Sri Palaniappa Wind Mill	2.02	225	2125	N 080 11' 19"	E 077° 35' 11"
C294	Sri Raju Cotton Mills	2.01	1250	1179	N 08 56 57.9	E 077° 35 15.1
C294	Sri Raju Cotton Mills	2.02	750	1629	N 08 58 44.4	E 077° 30 32.0
C295	Sri Ram Santhosh	2.01	225	313	N 10 55 30.4	E 077 17 46.8
C295	Sri Ram Santhosh	2.02	225	313	N 10 55 21.5	E 077 17 46.4
C296	Sri Ramnarayan Mills Ltd	2.01	750	1536	N 08 58 35.2	E 077 29 83.6
C296	Sri Ramnarayan Mills Ltd	2.02	750	1537	N 08 57 53.5	E 077 29 84.6
C297	Sri Renuga Ginning & Oil Mills Spinning Division	2.01	500	1785	N 09° 28 51	E 077° 25 14.3
C298	Sri Saravana Spinning Mills (P) Ltd	2.01	1650	1160	N 10 36 22.9	E 077 20 29.5
C299	Sri Saravana Spinning Mills (P) Ltd	2.01	1650	1324	N 10 39 11.0	E 077 10 99.1
C300	Sri Sathu Spinning Mills (P) Ltd	2.01	750	1759	N 08° 59' 09.02"	E 077° 27' 25.15"
C301	Sri Seethalakshmi Steel Castings (P) Ltd	2.01	350	1366	N 10 35 42.2	E 077 18 28.1
C302	Sri Sivajothi Spinning Mills (P) Ltd.,	2.01	225	514	N 10 43' 10.1"	E 077 21' 01.3'



CDM – Executive Board

page 82

C302	Sri Sivajothi Spinning Mills (P) Ltd.,	2.02	225	834	N 10 43' 12.6"	E 077 21' 53.9'
C302	Sri Sivajothi Spinning Mills (P) Ltd.,	2.03	225	955	N 10 43 07.5'	E 077 21' 52.4'
C302	Sri Sivajothi Spinning Mills (P) Ltd.,	2.04	225	708	N 10 ⁰ 43' 31.3"	E 077 ⁰ 21' 20.6"
C302	Sri Sivajothi Spinning Mills (P) Ltd.,	2.05	225	1211	N 10 ⁰ 43' 36.1"	E 077 ⁰ 21 19.1"
C302	Sri Sivajothi Spinning Mills (P) Ltd.,	2.06	225	1344	N 10 ⁰ 43' 25.1"	E 077 ⁰ 21' 22.5"
C303	Sri Sughan International	2.01	225	456	N 10 ⁰ 52'	E 077 ⁰ 11'
C304	Sri Velayudhaswamy Spinning Mills (P) Ltd	2.01	1650	1158	N 10 60 86	E 077 33 04
C304	Sri Velayudhaswamy Spinning Mills (P) Ltd	2.02	1650	1161	N 10 60 73	E 077 34 01
C305	Sri Venkatachalapathi Modern Rice Mill	2.01	350	590	N 10 55 07.2	E 077 05 07.0
C306	Sri Venkatalakshmi Spinners (P) Ltd	2.01	750	825	N 10 36 37.2	E 077 10 20.0
C307	Sri Venkateshwara Wind Farms	2.01	225	2109	N 08 ⁰ 15 84.7'	E 077 ⁰ 35 37.8'
C307	Sri Venkateshwara Wind Farms	2.02	225	2109	N 08 ⁰ 15 82.0'	E 077 ⁰ 35 22.5'
C308	Sri Venkateshwara Wind Farms	2.01	225	2074	N 08 ⁰ 15 75.9'	E 077 ⁰ 35 36.0'
C309	Stallion Garments	2.01	750	2225	N 09 00.516	E 077 23.071
C309	Stallion Garments	2.02	750	2224	N 09 01.057	E 077 23.140
C310	Startime Apparels	2.01	225	870	N 10 ⁰ 43' 00.8"	E 077 ⁰ 21' 49 2"
C311	Status Exports	2.01	350	742	N 10 40 06.1'	E 077 21 05.1'



CDM – Executive Board

page 83

C312	Styleman Textiles (P) Ltd	2.01	500	1089	N 08° 09' 28.8"	E 077° 34' 11.6"
C312	Styleman Textiles (P) Ltd	2.02	500	1770	N 09° 03' 00.1"	E 077° 21' 28.5"
C313	Sudhan Spinning Mills (P) Ltd	2.01	1650	1295	N 10 58.61	E 077 21 07
C314	Suguna Automobiles	2.01	225	743	N 10° 41' 30.1"	E 077° 20' 09.5"
C314	Suguna Automobiles	2.02	225	1102	N 10° 41' 33.6"	E 077° 20' 22.7"
C315	Sulochana Cotton Spinning Mills (P) Ltd	2.01	750	670	N 10 36 40.5	E 077 09 62.6
C315	Sulochana Cotton Spinning Mills (P) Ltd	2.02	750	671	N 10 36 45.5	E 077 09 80.0
C315	Sulochana Cotton Spinning Mills (P) Ltd	2.03	750	389	N 10 38 33.0	E 077 08 66.8
C315	Sulochana Cotton Spinning Mills (P) Ltd	2.04	500	517	N 10 56' 31.4"	E 077 13' 40.3"
C315	Sulochana Cotton Spinning Mills (P) Ltd	2.05	500	518	N 10 56' 31.4"	E 077 13' 41.5"
C315	Sulochana Cotton Spinning Mills (P) Ltd	2.06	500	528	N 10 56' 36.8"	E 077 13' 30.8"
C316	Sun India Hatcheries Pvt Ltd	2.01	250	1613	N 08 10 02.4	E 077 34 12.9
C317	Sun Industrial Automation & Solution	2.01	350	1775	N 08 11 22.4	E 077 38 24.2
C317	Sun Industrial Automation & Solution	2.02	350	1852	N 08 11.29.4	E 077 38 02.7
C317	Sun Industrial Automation & Solution	2.03	350	2453	N 08 17 41.5	E 077 37 33.6
C317	Sun Industrial Automation & Solution	2.04	350	2454	N 08 17 35.4	E 077 37 35.5



CDM – Executive Board

page 84

C318	Sun Poly Sacks (P) Ltd	2.01	250	1266	N 10° 43 28.8'	E 077° 20 75.1'
C319	Super Spinning Mills Ltd	2.01	1250	1370	N 08 56 40.7	E 077 35 40.7
C320	Suriya Spinning Mills	2.01	500	617	N 10° 56 52.4	E 077° 12 21.2
C321	Surya Oil and Extractions Pvt Ltd	2.01	350	1317	N 10 35 43.2	E 077 19 02.1
C322	Swami Palani Andavar Spinners (India) Pvt Ltd	2.01	500	379	N 10° 41 43.0	E 077° 21 36.0
C322	Swami Palani Andavar Spinners (India) Pvt Ltd	2.02	225	1030	N 10° 43 39.4	E 077° 21 25.9
C322	Swami Palani Andavar Spinners (India) Pvt Ltd	2.03	225	1126	N 10° 43 45.2	E 077 21 23.3
C323	Swarnapuri AVR Jewellery	2.01	350	2386	N 08 18 09.9	E 077 38 04.5
C324	Swathi Hacharies	2.01	250	515	N 10 92 22.3	E 077 26 17.8
C325	T T Industries	2.01	1250	1385	N 10 49 02.5	E 077 27 04.3
C326	T.E.S. Fathu Rabbani	2.01	225	788	N 08 13 06.72	E 077 34 35.56
C326	T.E.S. Fathu Rabbani	2.02	225	1152	N 08 19 53.51	E 077 33 12.84
C326	T.E.S. Fathu Rabbani	2.03	225	1153	N 08 19 59.09	E 077 33 45.68
C327	T.E.S. Naina Mohamed	2.01	225	1154	N 08 19 56.68	E 077 33 51.95
C328	T.T. Ltd	2.01	1250	1384	N 10 49 14.1	E 077 25 45.6
C328	T.T. Ltd	2.02	1250	1195	N 10 43 07.4	E 077 25 15.0
C328	T.T. Ltd	2.03	1250	1200	N 10 43 05.4	E 077 25 00.2
C329	Tamilnadu Air Products (P) Ltd	2.01	500	1469	N 09° 01' 57.4	E 077° 22' 31.1
C330	Technocast Foundry	2.01	350	1448	N 10 35 30.3	E 077 18 38.2
C331	Thakadoor Spinning Mills (P) Ltd	2.01	750	1684	N 08 57 71.1	E 077 30 03.8
C331	Thakadoor Spinning Mills (P) Ltd	2.02	750	1055	N 08 59 17.5	E 077 22 86.6
C332	Thanga Maligai & Co., Jewellery	2.01	500	382	N 10° 39' 28.5	E 077° 19' 53.8



CDM – Executive Board

page 85

C333	The Tuticorin Spinning Mills Ltd	2.01	500	1724	N 08 15 46.1	E 077 44 128.8
C334	Theepam Embroideries	2.01	250	1230	N 10° 41' 28.7	E 077° 23' 33.1
C335	Thiagarajar Mills Ltd	2.01	1500	1432	N 10 49 05.0	E 077 06 04.8
C335	Thiagarajar Mills Ltd	2.02	1500	1433	N 10 49 19.4	E 077 06 30.1
C336	Thiruppathi Mills	2.01	1250	1516	N 08 16 35.8	E 077 40 31.6
C337	Tip Sons Financial Services Pvt Ltd	2.01	750	1649	N 08 59 39.9	E 077 27 39.9
C338	Tirupur Pandit Hosiery Mills Pvt Ltd	2.01	750	826	N 10 68 03	E 077 30 19
C338	Tirupur Pandit Hosiery Mills Pvt Ltd	2.02	750	826	N 10 67 86	E 077 30 14
C339	Tirupur Sri Sentil Cotton Mills	2.01	225	759	N 10° 43' 14.8"	E 077° 20' 55.3"
C339	Tirupur Sri Sentil Cotton Mills	2.02	225	759	N 10° 43' 19.6"	E 077° 20' 54.4"
C339	Tirupur Sri Sentil Cotton Mills	2.03	225	893	N 10° 43' 17.5"	E 077° 21' 03.9"
C339	Tirupur Sri Sentil Cotton Mills	2.04	225	893	N 10° 43' 12.7"	E 077° 21' 04.3"
C339	Tirupur Sri Sentil Cotton Mills	2.05	225	1075	N 10° 43' 06.6"	E 077° 21' 04.6"
C340	Tn Oxygen	2.01	250	2456	N 09° 03 49.0	E 077° 23' 82.2
C340	Tn Oxygen	2.02	350	2388	N 08 17 32.2	E 077 36 10.2
C341	Top Light Lables	2.01	225	675	N 10° 43' 10.1"	E 077° 22' 01.3
C341	Top Light Lables	2.02	225	676	N 10° 43' 10.9"	E 077° 21' 43.1
C341	Top Light Lables	2.03	750	912	N 10 42 86.4	E 077 29 13.2
C342	Twowin Export	2.01	225	575	N 10° 39' 25.5"	E 077° 20' 49.9"
C342	Twowin Export	2.02	225	575	N 10° 39' 30.5"	E 077° 20' 50.2"
C342	Twowin Export	2.03	225	863	N 10° 39' 24.1"	E 077° 20' 58.3"
C342	Twowin Export	2.04	225	864	N 10° 39' 25.5"	E 077° 21' 08.7"
C342	Twowin Export	2.05	225	1213	N 10° 42' 05.5"	E 077° 23' 46.3"



CDM – Executive Board

page 86

C342	Twowin Export	2.06	225	1214	N 10° 42' 19.3"	E 077° 23' 58.8"
C342	Twowin Export	2.07	250	1319	N 10 75 33.8	E 077 35 84.6
C342	Twowin Export	2.08	250	1320	N 10 75 48.0	E 077 35 84.1
C342	Twowin Export	2.09	250	1367	N 10 75 22.0	E 077 35 82.1
C343	Udaya Kumar Modern Rice Mill	2.01	250	803	N 10 69 32.8	E 077 33 14.8
C344	Unique Shell Mould (India) Pvt Ltd	2.01	600	618	N 10 56' 58.9"	E 077 12' 24.2"
C345	Unity Overseas Tirupur	2.01	350	1155	N 10 35 50.7	E 077 18 15.2
C345	Unity Overseas Tirupur	2.02	350	1137	N 10 36 43.3	E 077 19 18.3
C346	V. Balasubramanian	2.01	250	1215	N 10° 38' 21.6"	E 077° 18' 47.9"
C347	V.M.D. Mills (P) Ltd	2.01	750	1960	N 08° 56' 31.1	E 077° 38' 57.3
C348	V.N.C.Electrodes	2.01	500	1565	N 08° 14' 52.7"	E 077° 44' 47.9"
C349	V.N.C.Steel Distributors	2.01	500	1566	N 08° 15' 00.3"	E 077° 44' 48.6"
C350	V.N.V. Textile India (P) Ltd	2.01	250	1265	N 10 75 39.3"	E 077 37 49.8"
C351	V.S.N.C. Narasimha Chettiar Sons	2.01	600	2173	N 09° 01' 10.1"	E 077° 22' 55.9"
C352	V.T. Uthararaju	2.01	225	967	N 10° 436"	E 077° 310"
C353	V.Thangavel & Sons Pvt Ltd	2.01	350	272	N 10 55 42.4	E 077 05 52.2
C353	V.Thangavel & Sons Pvt Ltd	2.02	350	335	N 10 55 56.9	E 077 05 08.8
C354	V.W.Mohamed Iqbal	2.01	250	1657	N 08° 10'07.72"	E 077° 32'38.33"
C355	Vairam Wind Power	2.01	225	546	N 10° 54' 39.3"	E 077° 14' 31.4"
C356	Vanitha Textiles	2.01	350	1205	N 10 36 35.4	E 077 18 55.4
C357	Vasu Yarn Mills India (P) Ltd	2.01	250	1263	N 10 74 83.8	E 077 37 51.2
C357	Vasu Yarn Mills India (P) Ltd	2.02	250	1263	N 10 74 95.4	E 077 37 50.6
C357	Vasu Yarn Mills India (P) Ltd	2.03	250	1263	N 10 75 09.1	E 077 37 48.9
C357	Vasu Yarn Mills India (P) Ltd	2.04	250	1264	N 10 75 40.9	E 077 37 27.8
C358	Vedanayagam Hospital Private Ltd	2.01	225	390	N 07 39 24.6	E 120 87 90



C358	Vedanayagam Hospital Private Ltd	2.02	225	391	N 07 39 49.2	E 120 87 08
C359	Veejay Sales and Services Ltd	2.01	800	35	N 11 67 58.7	E 076 5 734
C359	Veejay Sales and Services Ltd	2.02	800	36	N 11 68 18.4	E 076 52 29
C360	Veejay Syntex Private Ltd.,	2.01	800	1065	N 11 ⁰ 86' 07.7"	E 076 ⁰ 89' 25"
C360	Veejay Syntex Private Ltd.,	2.02	600	874	N 09 ⁰ 21' 57.57"	E 078 ⁰ 08' 20"
C360	Veejay Syntex Private Ltd.,	2.03	600	1092	N 09 ⁰ 15' 57.8"	E 079 ⁰ 04' 31"
C361	Veejay Terry Products Ltd	2.01	800	1066	N 11 84 73.1	E 076 80 90
C361	Veejay Terry Products Ltd	2.02	800	1066	N 11 84 74.4	E 076 77 52
C361	Veejay Terry Products Ltd	2.03	800	1128	N 11 84 32.8	E 076 77 39
C362	Veejay Tools & Die Pvt Ltd	2.01	230	341	N 11 83 29.5	E 076 29 96
C362	Veejay Tools & Die Pvt Ltd	2.02	230	341	N 11 83 41.6	E 076 30 75
C363	Vel Murugan Energy Farm (P) Ltd	2.01	250	1253	N 10 75 34.8	E 077 36 73.4
C364	Velavan Stores	2.01	350	350	N 10 55 31.7	E 077 05 41.0
C365	Venbro Polymers	2.01	250	448	N 10 95 25.7	E 077 25 73.9
C365	Venbro Polymers	2.02	250	449	N 10 94 88.9	E 077 25 77.1
C365	Venbro Polymers	2.03	250	450	N 10 95 07.6	E 077 25 75.7
C366	Vetal Textiles & Electronics Pvt Ltd	2.01	350	304	N 10 55' 28.2"	E 077 06 47.3"
C366	Vetal Textiles & Electronics Pvt Ltd	2.02	500	393	N 10 55' 26.1"	E 077 06 33.9"
C366	Vetal Textiles & Electronics Pvt Ltd	2.03	500	413	N 10 55' 05.8"	E 077 06 58.7"
C366	Vetal Textiles & Electronics Pvt Ltd	2.04	500	469	N 10 55' 42.3"	E 077 06 29.0"
C366	Vetal Textiles & Electronics Pvt Ltd	2.05	250	652	N 10 94 38.7	E 077 31 23.2
C366	Vetal Textiles & Electronics Pvt Ltd	2.06	250	653	N 10 94 25.0	E 077 31 33.9
C366	Vetal Textiles & Electronics Pvt Ltd	2.07	250	672	N 10 93 67.2	E 077 31 26.4



CDM – Executive Board

page 88

C366	Vetal Textiles & Electronics Pvt Ltd	2.08	250	673	N 10 93 59.8	E 077 31 25.2
C366	Vetal Textiles & Electronics Pvt Ltd	2.09	250	676	N 10 93 71.7	E 077 31 07.3
C367	Victus Dyeings	2.01	800	1051	N 11 83 54.0	E 076 88 5
C368	Vijay Export	2.01	350	1080	N 10 36 41.7	E 077 18 28.6
C368	Vijay Export	2.02	350	2405	N 08 17 53.0	E 077 37 25.3
C369	Vijayalakshmi Spinning Mills	2.01	225	1236	N 10 ⁰ 44' 24.8"	E 077 ⁰ 21' 09.6"
C369	Vijayalakshmi Spinning Mills	2.02	225	1236	N 10 ⁰ 44' 36.9"	E 077 ⁰ 21' 13.8"
C370	Viking Knitters	2.01	1250	2027	N 08 55 43.4	E 077 35 10.9
C370	Viking Knitters	2.02	1250	363	N 10 52 52.0	E 077 07 26.1
C370	Viking Knitters	2.03	1250	321	N 10 53 27.5	E 077 08 14.1
C371	Viking Textiles Pvt Ltd	2.01	500	414	N 10 54 01.9	E 077 08 51.8
C371	Viking Textiles Pvt Ltd	2.02	500	415	N 10 54 09.2	E 077 08 49
C371	Viking Textiles Pvt Ltd	2.03	600	65	N 10 36 22 2	E 077 24 40.6
C371	Viking Textiles Pvt Ltd	2.04	600	57	N 10 36 32.0	E 077 25 00.4
C372	Vikram Machine Spindles	2.01	250	1446	N 10 ⁰ 38.478'	E 077 ⁰ 18.430'
C373	Vishnu Textiles	2.01	350	1372	N 10 35 35.5	E 077 18 38.3
C374	Viswanath Chemicals	2.01	225	1472	N 10 ⁰ 37' 47.4"	E 077 ⁰ 17' 24.1"
C375	Viswanathan & Company	2.01	750	1730	N 09 00 14.7	E 077 26 10.3
C376	VSM Weaves India Ltd	2.01	750	2010	N 09 01 19.8	E 077 24 36.7
C376	VSM Weaves India Ltd	2.02	750	2421	N 09 01 33.0	E 077 24 61.1
C377	VTM Ltd	2.01	1250	1436	N 08 16 42.7	E 077 40 14.6
C378	Warsaw International	2.01	250	360	N 10 93 68.5	E 077 24 77.2
C378	Warsaw International	2.02	250	361	N 10 93 81.2	E 077 24 72.9
C378	Warsaw International	2.03	250	610	N 10 93 72.6	E 077 25 16.5
C378	Warsaw International	2.04	250	611	N 10 93 85.2	E 077 25 13.6



CDM – Executive Board

page 89

C378	Warsaw International	2.05	250	612	N 10 93 98.5	E 077 25 13.0
C379	Westerlies Wind Power (P) Ltd	2.01	250	1281	N 10 76 42.6	E 077 36 75.4
C379	Westerlies Wind Power (P) Ltd	2.02	250	1282	N 10 75 84.8	E 077 36 51.6
C380	Yash Metal & Alloys	2.01	500	1804	N 08 ⁰ 23' 12.4"	E 077 ⁰ 34' 54.3"
C381	Amaravathi Textiles	2.01	850	1576	N 08 ⁰ 16' 28.2"	E 077 ⁰ 36' 47.2"
C382	Anand Spinners	2.01	500	449	N 10 ⁰ 41' 43.2"	E 077 ⁰ 21' 58.4"
C383	Dr. R. Kannan	2.01	225	764	N 10 ⁰ 44' 31.2"	E 077 ⁰ 23' 43.0"
C384	Dr.Punithavathi Kannan	2.01	225	845	N 10 ⁰ 44' 43.2"	E 077 ⁰ 23' 32.1"
C385	Everest Fabrics	2.01	225	915	N 10 ⁰ 40' 43.0"	E 077 ⁰ 19' 10.3"
C385	Everest Fabrics	2.02	225	821	N 10 ⁰ 40' 38.6"	E 077 ⁰ 19' 10.5"
C386	Geetha Krishna Spinning Mills Pvt. Ltd.,	2.01	750	1310	N 08 ⁰ 13' 52.5"	E 077 ⁰ 37' 53.2"
C387	Jayakrishna Flour Mills Pvt. Ltd.,	2.01	225	2052	N 08 ⁰ 13' 51.5"	E 077 ⁰ 33' 75.0"
C387	Jayakrishna Flour Mills Pvt. Ltd.,	2.02	225	2335	N 08 ⁰ 13' 23.6"	E 077 ⁰ 33' 03.9"
C387	Jayakrishna Flour Mills Pvt. Ltd.,	2.03	225	2448	N 08 ⁰ 12' 92.1"	E 077 ⁰ 32' 93.2"
C387	Jayakrishna Flour Mills Pvt. Ltd.,	2.04	225	2449	N 08 ⁰ 12' 98.9"	E 077 ⁰ 32. 96.8"
C387	Jayakrishna Flour Mills Pvt. Ltd.,	2.05	225	2450	N 08 ⁰ 13' 04.5"	E 077 ⁰ 32.' 94.6"
C387	Jayakrishna Flour Mills Pvt. Ltd.,	2.06	225	2451	N 08 ⁰ 12' 84.0"	E 077 ⁰ 32' 92.5"
C387	Jayakrishna Flour Mills Pvt. Ltd.,	2.07	225	2452	N 08 ⁰ 13' 10.6"	E 077 ⁰ 32' 98.7"
C387	Jayakrishna Flour Mills Pvt. Ltd.,	2.08	600	950	N 08 ⁰ 19' 72.8"	E 077 ⁰ 34' 97.3"
C388	K.A.S. Industries India Ltd.,	2.01	250	581	N 10 ⁰ 94' 55.8"	E 077 ⁰ 31' 44.0"
C388	K.A.S. Industries India Ltd.,	2.02	250	582	N 10 ⁰ 94' 44.2"	E 077 ⁰ 31' 48.3"
C389	Kikani Exports	2.01	500	436	N 10 ⁰ 56' 04.5"	E 077 ⁰ 09' 24.0"



C390	Micro Colour Makers	2.01	250	1488	N 08° 23' 19.5"	E 077° 71' 88.9"
C390	Micro Colour Makers	2.02	250	2059	N 08° 17' 73.5"	E 077° 38' 58.0"
C391	New Trend Exports	2.01	250	356	N 10° 92' 41.1"	E 077° 13' 85.5"
C392	Ramaswamy Naidu Textiles Ltd.,	2.01	500	485	N 10° 35' 08.9"	E 077° 09' 57.0"
C392	Ramaswamy Naidu Textiles Ltd.,	2.02	500	642	N 10° 34' 43.0"	E 077° 10' 19.3"
C393	S.B.T. Apparels Pvt. Ltd.,	2.01	750	2191	N 09° 02' 05.9"	E 077° 24' 54.5"
C394	Sree Vijayalakshmi Textiles	2.01	500	448	N 10° 41' 50.0"	E 077° 21' 57.9"
C395	Sri Murugan Mills	2.01	225	947	N 10° 40' 42.1"	E 077° 19' 00.4"
C396	The Prem Dyeing Works	2.01	500	297	N 10° 56' 14.5"	E 077° 19' 22.2"
C397	Unnamalai Spinning Mills	2.01	330	729	N 11° 86' 84.5"	E 076° 27' 48"



Appendix- 4 – WTGs size wise Project Cost and Pass wise PLF as per Investment guidelines for 2005 onwards

Capacity	Proposed Cost/MW for different size WTGs			
	Make	2005	2006	2007
225	NEPC, SWFL, VESTAS RRB	525	551	579
230	ENERCON	525	551	579
250	CWEL, PIONEER WINCON, SRIRAM EPC LTD	475	499	524
330	ENERCON	525	551	579
350	SUZLON	475	499	524
500	VESTAS RRB	600	630	662
600	ENERCON, SUZLON, VESTAS RRB	575	604	634
750	NEG MICON/ VESTAS, NEPC, VESTAS	525	551	579
800	ENERCON	600	630	662
850	PIONEER ASIA WIND TURBINES	575	604	634
1250	SUZLON	600	630	662
1500	SUZLON			650
1650	VESTAS, NEG MICON/VESTAS	650	683	717



	PLF %		
Capacity	Aralvaimozhi Pass (A)	Shencottah Pass (B)	Palghat Pass (C)
0.225	23.61%	20.04%	17.48%
0.230	22.81%	20.26%	16.74%
0.250	20.98%	18.64%	15.40%
0.330	19.84%	16.98%	14.18%
0.350	18.71%	16.01%	13.37%
0.500	27.45%	21.68%	20.49%
0.600	24.32%	20.03%	19.48%
0.750	22.39%	18.59%	17.91%
0.800	27.73%	21.88%	20.52%
0.850	26.84%	20.58%	21.14%
1.250	26.04%	21.00%	20.88%
1.500	25.50%	20.59%	20.77%
1.650	29.79%	22.93%	23.43%

**Appendix- 5 Biomass power plant installation in Tamilnadu state**

Power/Co-generation Projects in Tamilnadu								
(2002-2003 to 2004-2005 and 31.12.2007)								
(MW)								
States	2002-2003			2003-2004			2004-05	
	Biomass	Co-	Total	Biomass	Co-	Total	Biomass	Co-
	Power	gene-		Power	gene-		Power	gene-
		ration			ration			ration
Tamil Nadu	16.5	89.5	106	16.5	134	150.5	34	138.5

Source: Ministry of Non-Conventional Energy Sources, Govt. of India and Ministry of New and Renewable Energy, Govt. of India.

Link: <http://www.indiastat.com/india/ShowDataSec.asp?secid=88618&ptid=184>