

# Energy Management Centre - Kerala (Department of Power, Govt of Kerala)

## **CERTIFICATE OF EMPANELMENT**

This is to certify that **M/s. Ottotractions**, (SRL-A21, Sasthamangalam. P.O, Thiruvananthapuram – 695010) is empanelled as Energy Audit firm in Energy Management Centre Kerala to conduct mandatory energy audit as per Government of Kerala G.O (Rt) No.2/2011/PD dated 01.01.2011.

# Empanelment No: EMCEEA-0211F-3

0	Building	Industry -Electrical	Industry Thermal
Scope/Area	Yes	Yes	Yes

This empanelment is valid up to 01/02/2024 Issuing Date: 02/02/2021 Place: Thiruvananthapuram

> Director, Energy Management Centre Kerala

## FORMAT - STATUS UPDATION

Name and address of the EMC registered Energy Audit firm (EMCREA)		OTTOTRACTIONS				
Empanelment N	0.		EMCEE	A- 0211F-1		
registration with	n EMC	rgy audits complet C. (No's) G.O (Rt ) No.2/2011/F			298	
review committe	e co	udit reports presen nceived by submit G.O (Rt ) No.2/2011/F	ted to El	MC (No's)	25	
Number of energicommittee	gy au	udit reports evalua <sup>.</sup>	ted by re	eview		25
Number of energ	gy au	udits in progress (N	lo's)			50
		Details of	Audit F	Firm		
	SL No	Name, Address, Tel email	No and	Qualifica	tion	Designation
	1.	SURESH BABU B OTTOTRACTIONS otenergy@gmail.	<b>;</b>	B TEC ACCRED ENERC AUDITO	FIED Gy	ACCREDITED ENERGY AUDITOR
Details of Resource persons	2.	BENCY ZACHARIA OTTOTRACTIONS otenergy@gmail.	5	DEPLOI	МА	DIRECTOR
(use additional sheets if required)	3.	THOMAS ZACHAR OTTOTRACTIONS otenergy@gmail.	S DEPLOMA		MA	DIRECTOR
	4.	ARJUN V OTTOTRACTIONS otenergy@gmail.		MBA		DATA ANALYSIT

	SL No	Name, Address, email	Tel No and	EA/EM registration No	Qualification
	1.	SURESH BABU B V OTTOTRACTIONS otenergy@gmail.com		AEA 33	ACCREDITED ENERGY AUDITOR
Details of Certified Energy auditors/Energy Managers (use additional sheets if required	2.	MOHAMMAD TASLIM K A OTTOTRACTIONS otenergy@gmail.com		EA-22995	CERTIFIED ENERGY AUDITOR
	3.	JAMSHED P UMAR OTTOTRACTIONS otenergy@gmail.com		EA-27859	CERTIFIED ENERGY AUDITOR
Details of energy audit equipment's [Additional sheets attached]			2. FLUE 3. LUX M 4. ANEM 5. THER	IOMETER MAL IMAGER ARED THERMO	R

	1. Details Of Energy Audit Completed ( Year 2014-15, 2015-16, 2016-17)					
		PRESENT STATUS				
SI No	NAME OF THE HT / EHT CONSUMER	Date of submission of Report.	Whether report have evaluated by EMC (Yes/No)			
1	Attached	Attached	Attached			
2	Attached	Attached	Attached			
3	Attached	Attached	Attached			
4	Attached	Attached	Attached			
	2. Details of Energy A	udit in Progre	SS			
SI. No	NAME OF THE HT / I	EHT CONSUMER				
1	Attached					
2	Attached					
3	Attached					
4	Attached					
5	Attached					

Enclosures

- 1. Client List
- 2. Equipment List

	LIST OF INSTRUMENTS OWNED BY OTTOTRACTIONS (As on April 2018)						
SI No	Details Of Equipment	Make	Model				
Electri	cal						
1	Power Quality Analyzer	Hikoi	3197				
2	Power Quality Analyzer	Hikoi	PW 3360-21				
3	Power Quality Analyzer	Elcontrol	Micro VIP 3+				
4	Power Quality Analyzer	Hikoi	3286				
5	Harmonic Analyser	Elcontrol	Nano Mem +				
6	Digital Earth Resistance Tester	CIE	DET-2000				
7	True RMS 6000 Count Handheld Digital Multimeter	Agilent	U1232a				
Therm	al						
8	Flue Gas Analyzer	Kane	Kane-450				
9	Thermal Imager	Testo	875-1i				
10	Infrared Thermometer	Hioki	3419-20				
11	Infrared Thermometer	Fluke	62 Mini				
12	Mercury Thermometers.	Zeal					
13	Digital Thermometer (Thermocouples)	Select	CH 403				
Other							
14	Non Contact Tacho Meter.	Lutron	DT-2234c				
15	Lux Meter	Extech	HD450				
16	Lux Meter	Lutron	Lx-101				
17	Strobo Scope	Testo	477				
18	Anemo Meter	Metravi	AVM-02				
19	Alti Meter/ Hygrometer	HTC	AL-7010				
20	GPS	Gramin	MAP62				
21	Ultrasonic Flow Meter	Greyline	FM4+E9:H3130				

# **B V SURESH BABU**



Email and website: sureshbabubv@gmail.com otenergy@gmail.com www.ottotractions.com

Address for Communication: -Residence: "UPANADAM" 170- DEVI NAGAR VALIYAVILA, THIRUMALA P O TRIVANDRUM- 06

#### Office:

OTTOTRACTIONS, SRL-A21, SASTHAMANGALAM P O TRIVANDRUM-695010

Phone:-

Mobile : +91 9447068747 Res : +91 471 2368747

**Professional Associations:** 

- 1. *Fellow SEEM* (Society for energy engineers and managers)
- 2. Head, Energy Division, CISSA, Centre for Innovation in Science and Social Action.
- 3. Coordinator, FAEA, Forum of Accredited Energy Auditors, India
- 4. Founder Secretary of *the IDEAS* (The institute of social engineers in Developmental Activities)

#### **Professional Qualification**

- Accredited Energy Auditor, Bureau of Energy Efficiency Government of India, AEA-0033.
- Empaneled Accredited Energy Auditor, Bureau of Energy Efficiency Government of India, EmAEA-035
- Empaneled Energy Auditor, EMC, Government of Kerala
- Authorized Energy Auditor, GEDA, Government of Gujarat
- Empaneled Energy Auditor, ISTSL, SIDBI
- Advanced Studies in Bioenergy Systems, Indian Institute of Science, Bangalore.
- B-Tech in Mechanical- Production Engineering, Kerala University.

### Awards

Won **"Kerala State Energy Conservation Award"** in appreciation of the commendable achievements towards energy conservation and management in the category of best performance as an Energy Auditor in the state of Kerala.

First Energy Auditor from Kerala State to get National Accreditation from Bureau of Energy Efficiency, Government of India

#### **Technical Expertise**

**Energy Management:** Mandatory Energy Audits (Thermal and Electrical), Focused area audit like Compressed air, Pumping, Process, Electrical and Thermal systems, Power Quality Analysis, Carbon Mitigation Projects, Low carbon projects.

Renewable Energy: Consultancy and implementation support for Small and Micro Hydel Projects, Biomass Projects (Thermal and Electrical), Solar systems (Electrical and Thermal), Biogas, and other RE based devices.

#### **Area of Interest**

Energy Studies, Supply and Demand side Studies

- Energy auditing and implementing energy efficiency projects.
- Studies in Low Carbon Technologies.
- Associating with institutions and individuals working in the related area.
- Conducting classes/training in Energy and Engineering systems, Renewable energy etc.
- Science writing and associating with people science movements.

## PROFESSIONAL EXPERIENCE

Have an experience of 18 years as an Engineer.

## 1. Professional experience record (projects):

Date:	April 2005 to till date
from (month/year) to	
(month/year)	
Location	Trivandrum, Kerala, India
Company	OTTOTRACTIONS
Position	Co-founder and Accredited Energy Auditor

## **Responsibilities**

- Lead the energy audit team in the Capacity of Accredited Energy Auditor of Bureau of Energy Efficiency, Government of India and Senior Consultant
- Energy efficiency project preparation and implementation and Vendor development.
- Project implementation of Solar Power Plants, Micro/Pico Hydel Projects, and Biomass based energy systems.
- Conducting training program and awareness programs.

## Major Projects Associated

- 1. Conducted/associated over 380 detailed energy audits and PAT M&V audit in diversified industries (including Designated Consumers) in India through OTTOTRACTIONS.
- 2. Completed the project "Screening of 37 PSUs in Kerala for Carbon Emission Reduction and CDM benefits" funded by Directorate of Environment and Climate Change (DoECC), Government of Kerala.
- 3. Principal Investigator of the Project "Low Carbon Schools" funded by Kerala State Science Technology and Environment (KSSTE) through CISSA.
- 4. Co-Investigator of the project "Low Carbon Schools in Munnar, Kerala funded bu DoECC through CISSA.
- 5. Actively associating with renewable energy projects like Solar, Gasifier, Small and Pico Hydel projects, Biogas etc.
- 6. Conducted Energy Audits of public spaces in four panchayats of Kerala as part of Model Energy Efficient Grama Panchayat Project of EMC- Government of Kerala.
- 7. Assessment of Energy Conservation Potential of 4 identified clusters in Kerala, A project of Bureau of Energy Efficiency, Govt of India, and responsibility to conduct the study in the state of Kerala in association with National Productivity Council.
- 8. Reconnaissance Study of Potential Small Hydro Projects at Malappuram and Thrissur Districts of Kerala, India, for Total Energy Security Mission, ANERT, Kerala. During the study, identified 130 potential small or pico hydel project sites.
- 9. Implementation of Pico Hydel Projects with cost effective technologies (10kVA, 15kVA already installed with PAT technology).
- 10. Implementation of Cost Effective Solar Power Plants (2kVA grid interactive already installed).
- 11. Developed a wood gas stove (biomass gasifier based) for domestic application. The stove has been demonstrated at various "*National workshops on cooking stoves*". The stove is tested and has an efficiency of 55% (existing open fire stove has an efficiency of 15% only). The stove is now running on field testing with the help of a reputed NGOs.
- 12. Project coordinator for **PROMISS** (PROMOTION OF MICRO ENTERPRISES

FOR SUSTAINABLE DEVELOPMENT THROUGH INNOVATIVE SELF HELP GROUPS)(The project prepared for Ranni Block Panchayath for poverty alleviation through sustainable development and woman empowerment).This Project has been sanctioned by the Government of Kerala and is under the consideration of Government of India, in its Special SGSY scheme. The total project out lay is Rs. 15 Cores.

Date:	2003 June to 2005 March.
Location	Palakkad, Kerala
Company	<b>INTEGRATED RURAL TECHNOLOGY CENTRE (IRTC), PALAKKAD,</b> <b>KERALA</b> .
Position	Scientist
Respons	sibilities
	Coordinating and managing the projects undertaken by the energy division Provide engineering support to various projects and division in the institution.
	Associated
Trojecio	<ol> <li>Active team member of the project "Field testing of down draft biomass gasifier using coconut wastes as fuel" done at IRTC in association with Indian Institute of Science (IISc), Bangalore and Centre for Development Studies (CDS) Trivandrum.</li> </ol>
	2. Team member for the project for developing " <i>Producer gas based cooking burner for domestic applications</i> ".
	3. Team Member of the project "An investigation into the effects of high harmonics and low power factor of low cost energy efficient lighting devices in typical rural distribution system", this project is done by IRTC in collaboration with KSEB, Trivandrum in 2004.
	<ul> <li>4. Coordinator of the project "Energy audit in selected rice mills of Palakkad district" in association with Energy Management Centre (EMC), Trivandrum and NSS engineering college, Palakkad.</li> </ul>
	5. Co-investigator of the project " <i>Investigation on the wastages of engineering colleges in Kerala</i> ", (www.cds.edu) the study has been conducted with the support from Centre for Development Studies (CDS) in its KRPLLD project. The study reveals the reasons behind the failures and wastages in the engineering colleges of Kerala state.
	<ul> <li>6. Team leader for the development and fabrication of ball mills, stirrers and transfer mechanisms for the project "Development of natural rubber latex based coating compound for the modification of polystyrene Hot Box to improve durability and aesthetics" a project funded by Department of Science and Technology, Government of India.</li> </ul>
	<ul> <li>7. Designed a 90 tonne per day capacity solid waste treatment plant screening facility of Palakkad Municipality. Developed innovative screening mechanisms and designed an optimum process line for the system.</li> </ul>
	<ol> <li>Team member of the project "Development of a plastic bag screener and self- cleaning rotary screener" for the solid waste treatment plants for medium and big cities.</li> </ol>
	<ol> <li>Designed and developed a de-fluoridation equipment to be used for the community based water tanks in Palakkad district.</li> </ol>
	10 Study on the energy conservation opportunity identification in domestic sector

10. Study on the energy conservation opportunity identification in domestic sector is another area of activity.

Date:	May 2000 to May 2003
Location	New Delhi
Company	TECHLAB, NEW DELHI
Position	Engineer R&D
Responsi	bilities
1.	Team member of the project for the development of vaporizers, solenoids, multivalve: essential parts for the gaseous fueling in automobiles. I was responsible to complete the homologation process at Automotive Research Association India (ARAI), Pune and Department of Explosives, Nagpur according to UNECE-67-R1 regulation and Government of India rules. Completed this work successfully and all these products are now in the market and performing well. Responsibility to be the management representative (MR) for the ISO certification process: for the quality assurance program of the organization. Attended training programs on QMS by BIS and other organisations in this regard.
	Active team member for the development of auto gas fueling system for three wheelers by Scooters India Ltd. (SIL) Luknow. This project was successfully completed and in the process developed an optimized vaporisors, mixer and other safety valves and the vehicle was launched on 6 <sup>th</sup> Auto Expo at New Delhi. Team member for the development of a fueling system for a dual fuel mode 1500W 4 Stroke generator, which resulting in a considerable reduction in
	emission and increased fuel, and thermal efficiency and this system is launched in the market.

## **PUBLISHED PAPERS & ARTICLES**

- 1. Published an article on Teleportation "Vichitra Kalpanakalku Jeevan Vakkumpol" in "Vijnanakairali" official scientific magazine of Kerala Government.
- 2. Published an article in *Energy Efficiency Manager, a quarterly magazine of society of Energy Engineers and Managers, India* on Domestic Energy Conservation Technologies (April-June/2017/Vol::10/No::02, ISSN0974-0996 Page 11 to 20)
- 3. Presented a paper in Kerala Environment Congress 2017 on Energy Management and Climate Change Mitigation along with Mr AM Narayanan and Mr. Sandeep K
- 4. Co-authored with Prof: C J Sivasankaran and Prof: P K Ravindran and published the findings of the project "*Investigation on the wastages of engineering colleges in Kerala*".( http://www.cds.ac.in)
- 5. *"Rural energy initiatives in Kerala"* has been published in the annual report of Karl Kuber Institute, Coimbatore.
- 6. Presented "*Gasifier based wood gas cooking stove for domestic use*" at the national workshop on cooking stoves organized by ANERT, Government of Kerala. The presentations and demonstration of the stove were appreciated well in the programme. The same were covered by various print and visual media.
- 7. Presented a paper on "Biomass gasification performance of a 5KWe gasifier by using locally available biomass like coconut fronds". The paper has been presented in the National workshop on 'The studies on renewable energy and non-conventional energy systems" conducted by EMC in June 2004.

8. Presented a paper on Energy Efficiency and Energy management in Health care systems at Trivandrum in February 2010.

## TRAINING DETAILS

- 1. "International training programme on Bio-energy " held on June 2007 at Combustion, Gasification and Propulsion Laboratory (CGPL) Department of Aerospace Engineering, Indian Institute of Science (IISc), Bangalore. During this training I have acquired knowledge on the fundamentals of biomass utilization and applications involving advanced technologies for power generation.
- 2. Took number of classes for in energy efficiency in association with PCRA, WWF, EMC, BEE, FICCI etc.
- 3. Trainer at Various energy efficiency capacity building programs for industries and other stake holders.
- 4. Participated in various workshops and seminars on Bio energy and energy efficiency.

### **B V Suresh Babu**

Clie	nt List	(Completed / Ongoing)		Z)	
			OTTO Energy-Engi	RACT	IONS ronment
SI No	Code	Project	LOCATION	Year	Month
1	EA 299	KIMS- North	Trivandrum	2018	April
2	EA 298	KIMS – Mains	Trivandrum	2018	April
3	EA 297	Vetinary Dispensary	Panniannoor	2018	April
4	EA 296	Sisumandiram	Panniannoor	2018	April
5	EA 295	UPS Chambad West	Panniannoor	2018	April
6	EA 294	LPS Puzhikkal	Panniannoor	2018	April
7	EA 293	LPSAanitha	Panniannoor	2018	April
8	EA 292	Panchayath Samskarika Nilayam	Panniannoor	2018	April
9	EA 291	LPS Chambad 2	Panniannoor	2018	April
10	EA 290	HSS Chothavoor	Panniannoor	2018	April
11	EA 289	HS Chothavoor	Panniannoor	2018	April
12	EA 288	Krishibhavan	Panniannoor	2018	April
13	EA 287	Vetinary Subcentre	Panniannoor	2018	April
14	EA 286	UPS Kunnummal	Panniannoor	2018	April
15	EA 285	LPS Chambad	Panniannoor	2018	April
16	EA 284	LPS Marankandi	Panniannoor	2018	April
17	EA 283	UPS Arayakkool	Panniannoor	2018	April
18	EA 282	LPS Pannyannor	Panniannoor	2018	April
19		Homeo Hospital	Panniannoor	2018	April
20	EA 280	LPS Periyandi	Panniannoor	2018	April
21	EA 279	PHC Pannyannor	Panniannoor	2018	April
22	EA 278	Village Office	Panniannoor	2018	April
23	EA 277	LPS Bavanteparamba	Panniannoor	2018	April
24		Ayurveda Dispensary	Panniannoor	2018	April
25	EA 275	Panoor Block Panchayat Office	Panniannoor	2018	April
26	EA 274	Panchayat Office	Panniannoor	2018	April
27	EA 273	LPS Kuttipram	Panniannoor	2018	April
28	EA 272	AG's Office Building	Trivandrum	2018	April
29	EA 271	Drinking Water Project	Vadyarukonam	2018	April
30	EA 270	Drinking Water Project	Valupara	2018	April
31	EA 269	Drinking Water Project	Koovaparamb	2018	April
32	EA 268	Village Office	Pullampara	2018	April
33	EA 267	Homeo Hospital	Chullalam	2018	April
34	EA 266	Ayurveda Dispensary	Vellumannady	2018	April
35	EA 265	Maveli Store	Maruthummood	2018	April
36	EA 264	Anganavadi Buildings 2 (13 no)	Pullampara	2018	April
37	EA 263	Anganavadi Buildings 1 (12 no)	Pullampara	2018	April
38	EA 262	Veterinary Dispensary	Thembamood	2018	April
39	EA 261	Krishi Bhavan	Pullampara	2018	April
40	EA 260	Gramapanchayath Office Thembamood	Pullampara	2018	April
41	EA 259	Model School LPS Thembammood	Pullampara	2018	April
42	EA 258	Navajyothi LPS Perumala	Pullampara	2018	April
43	EA 257	RM UPS Vayyakkav	Pullampara	2018	April
44	EA 256	KV UPS Vellumannadi	Pullampara	2018	April
45	EA 255	Janatha HSS Thempamood	Pullampara	2018	April
46	EA 254	Panayam Govt LPS	Pullampara	2018	April
47	EA 253	Nedumkaitha Govt LPS	Pullampara	2018	April
48	EA 252	Vellumannadi Govt LPS	Pullampara	2018	April
49	EA 251	Mukkudil Govt LPS	Pullampara	2018	April
50	EA 250	Perumala Govt LPS	Pullampara	2018	March
51	EA 240	Jersey Farm	Chettachal	2018	March

2018

2018

March

March

Chettachal

Kidangara

EA 249 Jersey Farm

EA 248 Malithara Foundry

51

52

53	FA 247	Homeo Hospital	Kunnam	2018	March
54		Medical Sub centres	Vechoochira	2018	March
55		Anganavadi Buildings	Vechoochira	2018	March
56		Government HSS	Colony	2018	March
57		Pump House	Perumthenaruvi	2018	March
58		Community Hall	Koothattukulam	2018	March
59		Community Hall	Kollammula	2018	March
60		Police Station	Vechoochira	2018	March
61		Village Office	Kollammula	2018	March
62	EA 235	Government LPS	Chathanthara	2018	March
63			Paruva	2018	March
64	EA 236	Government LPS	Vattukunnu	2018	March
65			Kunnam	2018	March
66		Community Health Centre	Vechoochira	2018	April
67		Veterinary Dispensary	Chathanthara	2018	May
68		Veterinary Dispensary	Vechoochira	2018	June
69			Vechoochira	2018	Julie
-		Ayurveda Dispensary			
70		Agricultural Office	Vechoochira	2018	August
71		Panchayat Office	Vechoochira	2018	Sep March
72		MC Cherian Hospital, Ranni	RANNI	2018	March
73		KSEB- MEA	KER	2018	Jan
74		KWA, Thiruvalla	KTM	2018	Jan
75		SMART IOPS	TV	2018	Jan
76		Techno Park	TVM	2017	Nov
77		Kudumbasree HQ	TVM	2017	Nov
78		GPT Kannur Block 4		2017	
79		GPT Kannur Block 3		2017	
80	EA 220	GPT Kannur Block 2		2017	
81		GPT Kannur Block 1		2017	
82	EA 218	Cochin Shipyard Ltd	ERN	2017	Nov
83		Mathrubhumi Kannur	KNR	2017	Nov
84		Mathrubhumi Kinfra	TVM	2017	Nov
85		Lafarge Novoco	Jamshedpur	2017	DEC
86		Bharatiya Vidya Niketan	Parassala		
87	EA 213	Solar Testing at AG Home TC	Thrissir	2017	oct
88	EA 212	ANERT	Trivandrum	2017	OCT
89	EA 211	KILA	Thrissur	2017	OCT
90	EA 210	Mini Civil Sation Building 4	Pathanmthitta	2017	Oct
91	EA 209	Mini Civil Sation Building 3	Pathanmthitta	2017	Oct
92	EA 208	Mini Civil Sation Building 2	Pathanmthitta	2017	Oct
93	EA 207	Mini Civil Sation Building 1	Pathanmthitta	2017	Aug
94	EA 206	IT @ School	Trivandrum	2017	Oct
95	EA 205	Meenangadi GP	Wayanad	2017	Aug
96		Civil Sation Building	Pathanmthitta	2017	Aug
97		Solar Testing at Assisi for TC	Thrissur	2017	Aug
98		-	Attingal	2017	Aug
99	EA 201	Oushadhi	Thrissur	2017	Aug
100	EA 200	TCL- IIT Chennai	Chennai	2017	May
101	EA 199	ISTL 2- CROWN	Chennai	2017	May
102		ISTL 1- ATPL	Banglore	2017	May
103		Baratheeya Vidya Bhavan- Pooj	Poojapura	2017	May
104		Baratheeya Vidya Bhavan-Man	Manvila	2017	May
105		Baratheeya Vidya Bhavan HSS	Kodunganoor	2017	May
105		Baratheeya Vidya Bhavan HS	Kodunganoor	2017	May
100		KTDC – Motel Araam	Alleppey	2017	April
107		KTDC – Motel Araam	Kayamkulam	2017	April
108		KTDC – Motel Araam	Mangattuparambu	2017	April
109	LY 191	IN DC - MULEI AIAAIII	manyattupataninu	2017	лрії

110	EA 190	KTDC - Motel Araam	Kottarakara	2017	April
111		KTDC-Tamarind Easy Hotel	Peerumedu	2017	April
112		KTDC-Tamarind Easy Hotel	Thirunelli	2017	April
113		KTDC-Tamarind Easy Hotel	Mannarkadu	2017	April
114		KTDC-Tamarind Easy Hotel	Nilambur	2017	April
115		KTDC-Tamarind Easy Hotel	Parassinikadavu	2017	April
116		Rain Drops,	Chennai	2017	April
117		KTDC-Garden House	PKD	2017	April
118		Hindustan Latex Limited(Hll)	TVM	2017	April
119		SIB HO Building	TSR	2017	April
120		SIB RO Building	TSR	2017	April
121		SIB Market Road Building	ERN	2017	April
122		SIB Ayyanthole Building	TSR	2017	April
123		Muthoot Skychef, Trivandrum	TVM	2017	
124		Hindustan Latex Limited(HII) KFC	ERN	2017	April
125		ILDM Building	TVM	2017	April
126		ILDM Academic	TVM	2017	April
127		Asian School of Business	TVM	2017	April
128		Energy Management Centre	TVM	2017	
129		DM Wayanad Medical College	WND	2016	
130			TVM	2010	
131		Thanal Disply Centre	TVM	2010	
132	EA 168	Thanal Organic Bazar	TVM	2010	
133	EA 160		TVM	2010	
134		Union Bank of India	TVM	2010	
135		Thrissur Corperation ED Buildings	TSR	2010	
136	EA 165		TSR	2010	
137		Desabhimani News Papers	MLP	2010	
138		Medical College Trivandrum	TVM	2010	
139		Sainik School Boiler Study	TVM	2010	
140		AVT Rubbers	PUN	2010	
141		Kerala Kumudi Kollam	KOL	2010	
142		Thellissery Cooperative Hospital	TSY	2010	
143	EA 150	TRIDA	TVM	2010	
144		All India Radio	TVM	2010	
145		SCTIMST BMT Wing	TVM	2010	
145		5	TVM	2010	
147	SA 1	Sudharsan Sree Padmanabha	TVM	2010	
148	SA 1	Sreelakhsmi Sree Padmanabha	TVM	2010	
148		Servvel L & C (Appolo)	TSR	2010	
149	WA 1	Wonder La Water Audit	EKM	2010	
150		Wonder La Energy Audit	EKM	2010	
151		Kerala Kaumudi	TVM	2016	
152		Quality Plumber Line Products	TSR	2016	
155		Aone Plastics	TSR	2016	
154	EA 130 EA 149		TVM	2016	
156		Instrument Workshop	TVM	2016	
150		Wood Workshop	TVM	2016	
157		Pressure Die Casting Unit	TVM	2016	
158		SIDCO Tools	KLM	2010	
160		Straw Board Factory	MNR	2016	
161		Wood Workshop	MKR	2016	
161		Service Workshop	TSR	2016	
162		Wood Workshop	KKD	2016	
164	EA 141 EA 140	Tool Room	KKD	2016	
164	CE-39	Earth Day Network 2016	KER	2016	
165		Pepper Grove	WND	2016	
100	EN 139		WIND	2010	

167	FA 120	Carden House Malampurka	סעס	2016
167		Garden House Malampuzha	PKD	2016 2016
168		SCTIMST Hospital KTDC Tamrind Kollam	TVM	
169			DTN	2016
170		Periyar House	PTN	2016
171		Legislative Assembly, Trivandrum	TVM	2015
172		Gramakala, IRTC	PKD	2015
173		Tamrind Easy Hotel , Neyyar	TVM	2015
174		Golden Peak , Ponmudi	TVM	2015
175		KTDC Corporate Office	TVM	2015
176		Water scapes	KTM	2015
177		Aranya Nivas	PTN	2015
178		Hotel Chaithram	TVM	2015
179	EA 126		RMP	2015
180	EA 125	Reserve Bank of India	ERN	2015
181	EA 124	Seil Chemicals Ltd	PUN	2015
182	EA 123	Brahmapuram Diesel Power Plant	ERN	2015
183	EA 122	Kerala Ayurvedic Studies and Research Society, Kottakkal	MLP	2015
184	EA 121	Tata Communications	ERN	2015
185	EA 120	AVT Rubbers	PUN	2015
186		Tata Consultancy Services CLC	TVM	2015
187		Tata Consultancy Services Pepul P2	TVM	2015
188		State Bank of Travencore	TVM	2015
189		MACFAST	TVL	2015
190		Catholic Syrian Bank	ERN	2015
191		Orion Mall	BNG	2015
192		Aspinwall Rubber Factory	MLP	2015
192		Rajadhani Institute of Tech	TVM	2015
194		Pankaja Kasturi College of Engg 1	TVM	2015
195		Assisi College of Engineering 2	TVM	2015
195		Upasana Hospital	QLN	2013
190		Mathrubhoomi News	ERN	2014
197		Mathrubhoomi	TVM	2014
198		Mathrubhoomi News	TVM	2014
200		Autokast	ALP	2014
201		KIMS Hospital North	TVM	2014
202		TTK Health Care Ltd	TVM	2014
203	EA 102		PKD	2014
204		-	TVM	2014
205		Priya Accumulators SME	KTM	2014
206	EA-99	Leela Electric SME	ERN	2014
207	EA-98	Intermix Factory	КОТ	2014
208	EA-97	Crump Rubber Factory,	КОТ	2014
209	EA-96	Rubek Baloon Factory,	ERN	2014
210	EA-95	Cochin Shipyard Ltd	EKM	2014
211	EA-94	Lourde Hospital	KNR	2014
212	EA-93	SN Dental Hospital	TVM	2014
213	EA-92	Assisi College of Engineering 1	TVM	2014
214	EA-91	SMA Rameswaram	ERN	2014
215	EA-90	Kerala State Planning Board	TVM	2014
216	EA-89	Centre for Environment Developemnt	TVM	2014
217	EA-88	Ramco Cements, Salem	SAL	2014
218	EA-87	Centre for Developement Studies	TVM	2013
219	EA-86	Amala Institute of Medical Science	TSR	2013
220	EA-85	AVT Rubbers	PUN	2013
221	EA-84	Mohan Das College of Engineering	TVM	2013
222	EA-83	Lulu Hyper Market	ERN	2013
223	EA-82	Manmohan Banglaw	TVM	2013

224	EA-81	Tata Communications	ERN	2013
225	EA-80	Aditech	TVM	2013
226		Sagara Sea Food	GUD	2013
227		Key Key Sea food	ERN	2012
228	EA-77	Oushadhi	TSR	2012
229	EA-76	Desabhimani Daily	MLP	2012
230		Desabhimani Daily	KNN	2012
230	EA-74	Desabhimani Daily	KOZ	2012
231	EA-74	Desabhimani Daily	TSR	2012
232	EA-72	Desabhimani Daily	ERN	2012
233	EA-72 EA-71	Desabhimani Daily	KOT	2012
234	EA-71 EA-70	Corporation Office	TVM	2012
235	EA-70 EA-69	KAIRALI STEELS&ALLOYS	ERN	2012
230	EA-69 EA-68	DC Mill	ALP	2012
237				2012
		KOTTACKAL AGRO FOODS	ERN	
239		POOJA MODERN RICE MILL	ERN	2012
240	EA-65	Desabhimani Daily	TVM	2012
241	EA-64	Ambady Dairy Products	TVM	2012
242	EA-63	Suntec Buisiner Solutions	TVM	2012
243	EA-62	Kumarakam Lake Resort	КОТ	2012
244		Redegg Tower	NAG	2012
245		Redegg Park	NAG	2012
246		KIMS Hospital	TVM	2011
247		Hotel Leela Kempinski	TVM	2011
248	EA-57	TATA COMMUNICATIONS	ERN	2011
249	EA-56	SPICES BOARD	ERN	2011
250	EA-55	KTDC CHAITRAM	TVM	2011
251	EA-54	KTDC THEKKADY	TKD	2011
252	EA-53	KTDC SAMUDRA	TVM	2011
253	EA-52	KTDC BOLGATTY	ERN	2011
254	EA-51	KTDC TEA COUNTY	MUN	2011
255	EA-50	KTDC GURUVAYOOR	TSR	2011
256	EA-49	KTDC WATER SCAPES	ALP	2011
257	EA-48	KTDC CORPORATE	TVC	2011
258	EA-47	POOVAR ISLAND RESORTS.	TVC	2011
259	EA-46	Prabhuram Mills, KSTC	CHE	2011
260	EA-45	Kottayam Textiles, Kottayam	КОТ	2011
261	EA-44	Malabar Textiles, Kozhikode	KOZ	2011
262	EA-43	Edarikkod Textiles, Edarikode	EDA	2011
263	EA-42	Steel And Industrial Forgings Limited, Athani, (SIFL)	TSR	2011
264	EA-41	Rehabiltation Plantations Limited, Punalur	KLM	2011
265	EA-40	Kollam Municipal Water Supply System	KLM	2011
266	EA-39	Quilon Cooperative Spinning Mill Ltd, Chathannoor	KLM	2010
267	EA-38	Thrissur Cooperative Spinning Mills Ltd, Vazhani	TSR	2010
268	EA-37	Travancore Titanium Products Limited, (For IIEM	TVM	2009
269	EA-36	Intermix Factory,Rubmark,Kaduthuruthy,	КОТ	2010
270	EA-35	Crump Rubber Factory, Rubmark ,Chenappady,	КОТ	2010
270	EA-34	Rubek Baloon Factory, Rubmark , Perumbavoor, Kerala	ERN	2010
271	EA-34	Energy Study at Government Treasuries	TVM	2009
272	EA-33 EA-32	Hotel Samudra,	TVM	2009
273		Poovar Island Resorts,	TVM	2010
274	EA-31 EA-30	Dental College Trivandrum,	TVM	2010
		Kerala Feeds Limited, Govt Of Kerala,	TSR	2010
276 277	EA-29 EA-28	Kerala Science And Technology Museum and	TSR	2009
278	EA-27	Traco Cables Ltd, Govt Of Kerala, Thiruvalla.	PTN	2009
279	EA-26	Rehabiltation Plantations Limited, Punalur	KLM	2008
280	EA-25	Sainik School, Kazhakkottam,	TVM	2008

201	FA 34	Unducton Latox Limited (UII) Triven during		2007
281	EA-24	Hindustan Latex Limited(HII), Trivandrum		2007
282	EA-23	Cosmopolitan Hospital, Thiruvananthapuram		2009
283	EA-22	Sut Super Speciality Hospitals, Thiruvananthapuram.	TVM	2010
284	EA-21	Alliance (Lessees) Jute Mill, Kolkatta,	KOL	2010
285	EA-20	Travancore Chemical Manufactures (TCM), Selam,	TN	2010
286	EA-19	HOTAL ARAM , KTDC	ALP	2007
287	EA-18	Yatri Nivas, KTDC	ALP	2007
288	EA-17	Pressure Die Casting Unit,	TVM	2009
289	EA-16	Government Instrument Workshop.	TVM	2009
290	EA-15	Government Wood Workshop,	TVM	2009
291	EA-14	Kerala Sidco Limited, Mavelikkara.	КОТ	2009
292	EA-13	Sidco Tools, Govt Of Kerala ,Umayanellur	KLM	2009
293	EA-12	Straw Board Factory, Govt Of Kerala ,Sidco, Parumala	КОТ	2009
294	EA-11	Sidco Service Workshop,	TSR	2009
295	EA-10	Government Wood Workshop,	KOZ	2009
296	EA-9	Trivandrum Club,	TVM	2010
297	EA-8	Handicraft Development Corporation Of Kerala, Head	TVM	2008
298	EA-7	Handicraft Development Corporation Of Kerala, Central	TVM	2008
299	EA-6	Handicraft Development Corporation Of Kerala, SMSM	TVM	2008
300	EA-5	Handicraft Development Corporation Of Kerala, Kairali,	TVM	2008
301	EA-4	Kerala State Bamboo Corporation Limited, Angamali.	ERN	2006
302	EA-3	A B L Cylinders (Lpg Cylinder Manufacturer)	ERN	2006
303	EA-2	Desabhimani Daily, (7 Units)	TVM	2005
304	EA-1	Ashtamudi Resorts	KLM	2005
305	PAT 1	Malabar Cements Ltd	PKD	2015
306	ES-28	Muthoot Skychef, Trivandrum	TVM	2015
307	ES-27	KIMS Hospital, Trivandrum	TVM	2015
308	ES-26	Domestic Energy Audit Manual Preperation	TVM	2015
309	ES-25	KTDC Corporate Office PF Study	TVM	2015
310	ES-24	Domesting Energy Audit, THM	ERN	2015
311	ES-24	Electrical system efficiency study	VIZ	2013
312	ES-23 ES-22	Thermo Graphic Study ar Vizag Ship	VIZ	2014
313	ES-22 ES-21	Tariff Change : Tata Communications	ERN	2014
	ES-21 ES-20			2014
314		EMC Refridgerator Study	TVM	
315	ES-19	Deshabhimani Kottayam	KTM	2014
316	ES-18	Thermographic Study at Muthoot PTA	PTA	2014
317	ES-17	Thermographic Study at Muthoot KZC	PTA	2014
318	ES-16	Amala IMS	TSR	2013
319	ES-15	Rubek Balloons	ERN	2013
320	ES-14	Power Quality Analysis : Tata Communications	ERN	2013
321	ES-13	Bayleaf, Thiruvananthapuram	TVM	2012
322	ES-12	PQA & Thermography at LEELA	TVM	2012
323	ES-11	PQA & Thermography at KIMS	TVM	2012
324	ES-10	PQA & Thermography : Tata Communications	ERN	2011
325	ES-9	Screening of Industrial PSUs in Kerala for Carbon	KER	2010
525		Emission Reduction and CDM Benefits - Report-1	itelt	
326	ES-8	Screening of Industrial PSUs in Kerala for Carbon	KER	2011
520	LJ-0	Emission Reduction and CDM Benefits - Report-2	NLN.	2011
327	ES-7	Screening of Industrial PSUs in Kerala for Carbon	KER	2011
521	LJ-7	Emission Reduction and CDM Benefits - Report-3		2011
328	ES-6	Ayur Green Health Care, (Team Sustain),Edappal	MLP	2011
220		Assessment of Energy Conservation Potential of 4		2000
329	ES-5	identified clusters in Kerala - (Rice , Rubber, Steel,	KER	2009
330	ES-4	Power Quality Study at Residential Building , Granma	TVM	
331	ES-3	Energy Study at Residential Building , TVM-1	TVM	
332	ES-2	Light Efficiency Study of LED Street Lighting, Trivandrum	TVM	
333	ES-1	Sarphin Comercial Building, Kochi	ERN	
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224	CE 20	Earth Day Natwork Croop Citias		2015
334		Earth Day Network Green Cities	KER	2015
335		Foam Mattings(India) Ltd, Alappuzha	KER	2011
336		Kerala Automobiles Ltd, Neyyattinkara,	KER	2011
337		Kerala Ceramics Ltd, Kundara, Kollam	KER	2011
338		Kerala Clays & Ceramic Products Ltd, Pappinisseri,	KER	2011
339		Kerala Electrical and Allied Engineering Co. Ltd., Kochi	KER	2011
340		Kerala Feeds Ltd., Kallettumkara, Thrissur	KER	2011
341		Kerala Minerals & Metals Ltd., Chavara, Kollam	KER	2011
342		Kerala State Bamboo Corporation Ltd., Angamaly South	KER	2011
343		Kerala State Cashew Development Corporation Ltd.,		2011
344		Kerala State Drugs and Pharmaceuticals Ltd., Kalavoor,		
345		Kerala State Road Transport Corporation Ltd.,		
346		Malabar Cements Ltd., Walayar, Palakkad		2011
347		Meat Products of India Ltd., Koothattukulam, Ernakulam		2011
348		The Metal Industries Ltd., Shoranur, Palakkad		2011
349		Oil Palm India Ltd., Kottayam		2011
350		The Pharmaceutical Corporation(IM)		2011
351	CE-21	Plantation Corporation of Kerala Ltd., Kottayam		2011
352		Rehabilitation Plantation Ltd., Punalur		2011
353		Sitaram Textiles Ltd., Poonkunnam, Thrissur		2011
354		State Farming Corporation of Kerala Ltd., Vettithitta,		2011
355		Steel Complex Ltd., Feroke, Kozhikode		2011
356		Steel and Industrial Forgings Ltd., Athani, Thrissur	KER	2011
357	CE-15	Traco Cable Company Ltd., Kochi		2011
358	CE-14	Transformers and Electricals Kerala Ltd., Angamaly	KER	2011
359	CE-13	Travancore Cements Ltd., Nattakom, Kottayam	KER	2011
360	CE-12	Travancore-Cochin Chemicals Ltd., Udyogamandal,	KER	2011
361	CE-11	Travancore Titanium Products Ltd., Kochuveli,	KER	2011
362	CE-10	Aleppey, Co-operative Spinning Mills	KER	2011
363	CE-9	Cannanore Co-operative Spinning Mills Ltd., Chovva,	KER	2011
364	CE-8	Kerala Co-operative Milk Marketing Federation	KER	2011
365	CE-7	Kerala Kerakarshaka Sahakarana Federation	KER	2011
366	CE-6	Kerala State Cashew Workers'Apex Industrial Co-	VED	2011
500		operative Society Ltd., (CAPEX), Kollam	NEN	2011
367	CE-5	Malabar Co-operative Textiles Ltd., Karthala Chungam,	KED	2011
507	CE-3	Kuttippuram via., Malappuram	KER         201           KER	2011
368	CE-4	Malappuram Co-operative Spinning Mills Ltd., Down Hill	KER	2011
369	CE-3	Priyadarshini Co-operative Spinning Mills Ltd.,	KER	2011
370	CE-2	Quilon Co-operative Spinning Mills Ltd.,Karamcode,	KER	2011
371	CE-1	Trichur Co-operative Spinning Mills Ltd., Vazhani,	KER	2011
372	RE-9	Installation of 2kVA grid interactive solar power plant	PKD	2012
373	RE-8	DPR for 2kVA grid interactive solar power plant	PKD	2012
374	RE-7	Implementation of 10kVA Micro Hydel Project- Gavi	PTN	2012
375	RE-6	Detailed Feasibility Study "Gavi Small Hydel Project" ,	PTN	2012
376	RE-5	Implementation of Rodovally Small Hydel Project", Silant	MUN	2011
377	RE-4	Reconnaissance Study of Potential Small Hydro Projects,		2010
378	RE-3	Detailed Feasibility Study "Rodovally Small Hydel Project"		2010
379	RE-2	Reconnaissance Study of Potential Small Hydro Projects,		2010
380	RE-1	Development of Wood Gas Stove "Prakrithi-2"		2009
	SR-1	Promotion of Micro Enterprises for Sustainable		
381		•	ΡΤΑ	1 1