



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

CERTIFICATE OF EMPANELMENT

*This is to certify that **M/S. Schneider Electric India Pvt Ltd**, (4th Floor, Electra wing A, Exora Business Park, Marathahalli, Sarjapur Outer Ring Road, Bangalore) 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- 1612F-1

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

This empanelment is valid up to 12th May 2018

Issuing Date: 13/05/2015

Place: Thiruvananthapuram


Director,
Energy Management Centre Kerala

Information of firm	
1.	Name & address of the firm Schneider Electric India Pvt Ltd 4th Floor, Electra wing A, Exora Business Park, Marathahalli, Sarjapur Outer Ring Road, Bangalore - 560103
	Office(with STD) 080 4333 3333 extn 3612
	Mobile +91 9611800893
	Fax number +91 8043332323
2.	Website (if any) www. Schneider-electric.com
3.	Email address b e n e t . g e o r g e @ s c h n e i d e r - e l e c t r i c . c o m
4.	Name ,Designation and address of Contact person Benet. George V, Sr.Manager Schneider Electric India Pvt Ltd 4th Floor, Electra wing A, Exora Business Park, Marathahalli, Sarjapur Outer Ring Road, Bangalore - 560103
5.	Office(with STD) +91 80 4333 3612 Fax: +91 44 39143214
	Residence(with STD) +91 9611800893
	Mobile +91 9611800893
6.	Email address b e n e t . g e o r g e @ s c h n e i d e r - e l e c t r i c . c o m
7.	Year of establishment 1995
8.	Year of commencement of energy audit by the firm. 2002
9.	No. of branch offices 4 (List of complete addresses including heads of all branch offices with telephone, fax and email addresses) Corporate Office: Delhi Schneider Electric India Pvt. Ltd. Professional Services 9 floor, DLF Building, 10, Tower C, DLF Cyber city, Phase II, Gurgaon, Haryana 122 002 Mr. Upendra Pratap Singh Associate General Manager, Audits & consultancy Phone: ++91-124-3849589 Fax: ++91-124-4222-036 Mobile: + +91 9910695696 upendrapratap.singh@schneider-electric.com Site: www.schneider-electric.com Branch Office: Bangalore Schneider Electric India Pvt. Ltd. 4th Floor, Electra wing A, Exora Business Park, Marathahalli, Sarjapur Outer Ring Road, Bangalore – 56010 Mr. Benet George V Sr. Manager, Audits & Consultancy Landline: +91 80 4333 3612 Fax: +91 44 39143214 Mobile +91 9611800893

	<p>benet.george@schneider-electric.com</p> <p>Site: www.schneider-electric.com</p>	
10.	<p>Branch Office: Kolkatta</p> <p>Schneider Electric India Pvt. Ltd. Technopolish,BP-4, 3rd Floor,Sector-V, Salt Lake,Kolkata-700091</p> <p>Srijit Mukherjee Manager- Audits & Consultancy Phone: + 91-33-3940400 Fax: +91-33-30248686 Mobile: +91-9674281515 Email: srijit2.mukherjee@schneider-electric.com Site: www.schneider-electric.com</p>	<p>Branch Office: Mumbai</p> <p>Schneider Electric India Pvt. Ltd. Marwah House, Second Floor, Krishanlal Marwah Marg, Andheri (East), Mumbai -400 072</p> <p>Manish. Thakre Sr. Engineer Phone: +91 -22-30263300 Fax: +91 22 3073 8800 Mobile: + 919767512644 Email: manish.thakare@schneider-electric.com Site: www.schneider-electric.com</p>

Details of Associated Energy Experts and Audits Conducted by firm																																				
1.	Number of resource persons available	8																																		
2.	Number of full-time energy auditors in position, with work experience of all energy auditors associated with the firm	7																																		
3.	No. of part-time energy auditors in position during the current year / previous year associated with the firm.	There are no Part time auditors, however, Schneider has a global team of 7 energy audit consultants out of which 3 are BEE Accredited auditors and a 200+ Project execution team																																		
4.	Sectors in which the energy audit firm has conducted energy audits since inception and number of audits in each sector	<table> <tbody> <tr><td>Buildings</td><td>148</td></tr> <tr><td>IT (BFO , ITES, DC, telecom)</td><td>36</td></tr> <tr><td>Automotive</td><td>20</td></tr> <tr><td>chemicals/ fertiliser/ chlor alakali</td><td>22</td></tr> <tr><td>Engineering</td><td>117</td></tr> <tr><td>Food & Beverages</td><td>98</td></tr> <tr><td>Cement</td><td>32</td></tr> <tr><td>Iron & Steel</td><td>41</td></tr> <tr><td>Mining</td><td>3</td></tr> <tr><td>Others Metals & Minerals</td><td>13</td></tr> <tr><td>Pul& Paper</td><td>8</td></tr> <tr><td>Power Plant</td><td>95</td></tr> <tr><td>Textile</td><td>36</td></tr> <tr><td>Water & Waste water</td><td>5</td></tr> <tr><td>Other Industry</td><td>9</td></tr> <tr><td>Infrastructure(airport, Highway, Shipyard, Port, railway, Utility)</td><td>34</td></tr> <tr><td>total</td><td>717</td></tr> </tbody> </table>	Buildings	148	IT (BFO , ITES, DC, telecom)	36	Automotive	20	chemicals/ fertiliser/ chlor alakali	22	Engineering	117	Food & Beverages	98	Cement	32	Iron & Steel	41	Mining	3	Others Metals & Minerals	13	Pul& Paper	8	Power Plant	95	Textile	36	Water & Waste water	5	Other Industry	9	Infrastructure(airport, Highway, Shipyard, Port, railway, Utility)	34	total	717
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5.	Energy audit process system (list sectors) - If no energy audit has been carried out of the process system and parameters, please list nil.	<ol style="list-style-type: none"> 1. Chlor Alkali, 2. Cement Process, 3. Power Plant, 4. Refinery, 5. Distillation 6. Beverages 7. Iron & Steel: Heat treatment, DRI, Blast furnaces, pelletizing, Coke batteries, electroplating 8. Pharma : Bulk drug formulations 9. Waste water treatment, 10. Polyester chips, 11. Glass, 12. Ceramics, 13. Tea 14. Rubber 15. Food processing(Rice, Oil, coffee) 16. Dairy, Textile, Tyre ,Printing 17. Breweries ,Pulp & paper 																																		

6.	Energy audit of thermal utility system (list sectors)	<ol style="list-style-type: none"> 1. Boilers 2. Steam System 3. Industrial furnaces 4. \Insulation & refractories 5. WHRB 6. Kiln 7. Dryer 8. Cogen systems 											
7.	Energy audit of electrical utility system (list sectors)	<ol style="list-style-type: none"> 1. Motors 2. Compressed air system 3. HVAC & refrigeration System 4. Fans & Blowers 5. Pumps & Pumping System 6. Cooling Towers 7. Lighting System 8. DG Sets 9. Transformers 10. CPP Coal & Gas 											
8.		(a) Electrical (list the name of the instruments)	<table border="0"> <tr> <td>Krykard Power Load Manger, ALM -35</td> <td style="text-align: right;">5</td> </tr> <tr> <td>Hioki PW 3198</td> <td style="text-align: right;">1</td> </tr> <tr> <td>Cryonics EP – 1 Dranetz</td> <td style="text-align: right;">1</td> </tr> <tr> <td>Meco TRMS 3510PHW</td> <td style="text-align: right;">3</td> </tr> <tr> <td>Krykard Power Load Manger, ALM -32</td> <td style="text-align: right;">1</td> </tr> </table>	Krykard Power Load Manger, ALM -35	5	Hioki PW 3198	1	Cryonics EP – 1 Dranetz	1	Meco TRMS 3510PHW	3	Krykard Power Load Manger, ALM -32	1
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Krykard Power Load Manger, ALM -32	1												
Instruments available	(b) Thermal (list the name of the instruments)	<ol style="list-style-type: none"> 1. Ultrasonic flowmeter , GE, -2 2. Anemometer (Testo, Prova, Lutron) -7 3. Infrared Thermometer (Metravi, testo, Raytek, Fluke) 3 4. Temperature data loggers(4 / 8 Channel) Testo, Madgetech 18 5. Psling Psychrometers 6 6. RH logger (Testo,) 2 7. Flue Gas Analyzer Testo, -5 8. Pressure meter (Testo, Comark) 11 9. Pressure Gauges(analog/ digital) 4 10. Tachometer (Lutron, Testo) 4 11. Lux Meter (Metravi, TES, Lutron, Testo)) 11 12. Infrared Thermal Imaging Camera 3 13. PH & TDS CD, Hanna, TDS) 4 14. IAQ Logger 2 15. Multiple parameter loggers HOBO 4 											

*Biodata of Certified Energy Auditor			
1	Name of energy auditor	Benet George V	
2.	Qualifications.	AMIE , MTech in Energetics Accredited Energy Auditor by Bureau of Energy Efficiency (BEE) India (AEA 0053), Certified Energy Auditor BY BEE CEA 6737 Certified CMV Professional by EVO & AEEE Certified CEM by AEE Certified PMP by PMI ISO 50001 Certified Lead auditor by Bureau Veritas	
3.	Experience. (use additional sheet if required)	11 years Experience out of which 7 years in energy audit and has conducted 100+ comprehensive energy audits in India and abroad	
4.	Residence(with STD)	+91 961180093	
5.	Mobile	+91 961180093	
6	Email address	Benet. George@schneider-electric.com	
7	Date of certification as Energy Manager or Energy Auditor (pl specify) by Bureau of Energy Efficiency (BEE) (if not appeared list as nil	10-08-2007	
8	Date of passing the examination in "Energy Performance Assessment for Equipment and Utility Systems"	10-08-2007	
9	Examination Registration Number of (i) Energy Manager (ii) "Energy Performance Assessment for Equipment and Utility Systems" (In case of Certified Energy Auditor, please write CEA Registration No.)	EA 6737	
10	Certificate Registration Number of (i) Energy Manager (ii) "Energy Performance Assessment for Equipment and Utility Systems"	No.2835	
Remarks(if any)--Nil			

I hereby state that information furnished above is true and correct to the best of my knowledge.

Place:

Date:

Signature:

Name:

Designation

*Biodata of Certified Energy Auditor		
1	Name of energy auditor	Upendra Pratap Singh
2.	Qualifications.	B E in Mechanical engineering and M Tech in Energy Studies Accredited by BEE AEA005 Certified Energy Auditor by Bureau of Energy Efficiency (BEE) India (EA 0232) Certified CMV Professional by EVO & AEEE
3.	Experience. (use additional sheet if required)	18 years experience in Energy audit and clean development mechanism in various industries. Carried out at about 250 comprehensive assignments in across various industries in different countries in India and abroad.
4.	Residence(with STD)	+91 9566656574
5.	Mobile	+91 9566656574
6	Email address	upendrapratap.singh@schneider-electric.com
7	Date of certification as Energy Manager or Energy Auditor (pl specify) by Bureau of Energy Efficiency (BEE) (if not appeared list as nil	6-04-2005
8	Date of passing the examination in "Energy Performance Assessment for Equipment and Utility Systems"	6-04-2005
9	Examination Registration Number of (i) Energy Manager (ii) "Energy Performance Assessment for Equipment and Utility Systems" (In case of Certified Energy Auditor, please write CEA Registration No.)	EA 0232
10	Certificate Registration Number of (i) Energy Manager (ii) "Energy Performance Assessment for Equipment and Utility Systems"	No.0062
Remarks(if any)—Nil		



I hereby state that information furnished above is true and correct to the best of my knowledge.

Place:

Date:

Signature:

Name:

Designation:

*Biodata of Certified Energy Auditor		
1	Name of energy auditor	Srijit Mukherjee
2.	Qualifications.	B.E in Mechanical Engineering. PG certification in energy management from IISWBM, Kolkata Certified Energy Auditor by Bureau of Energy Efficiency (BEE) India EA8376
3.	Experience. (use additional sheet if required)	10 years experience out of which 8.5 Years experience in Energy audits and conducted 100+ comprehensive assignments in Industrial and Commercial complexes in India and Abroad.1.5 years experience in energy efficient designing & execution of HVAC System in Commercial Buildings
4.	Residence(with STD)	+91 9609607237
5.	Mobile	+91 9609607237
6	Email address	Srijit2.mukherjee@schneider-electric.com
7	Date of certification as Energy Manager or Energy Auditor (pl specify) by Bureau of Energy Efficiency (BEE) (if not appeared list as nil	17-03-2009
8	Date of passing the examination in "Energy Performance Assessment for Equipment and Utility Systems"	17-03-2009
9	Examination Registration Number of (i) Energy Manager (ii) "Energy Performance Assessment for Equipment and Utility Systems" (In case of Certified Energy Auditor, please write CEA Registration No.)	EA 8376
10	Certificate Registration Number of (i) Energy Manager (ii) "Energy Performance Assessment for Equipment and Utility Systems"	No.4442
Remarks(if any)—Nil		



I hereby state that information furnished above is true and correct to the best of my knowledge.


Place:

Date:

Signature:

Name:

Designation:

*Biodata of Certified Energy Auditor			
1	Name of energy auditor	Mrinmoy Kumar Kayal	
2.	Qualifications.	PG Diploma in Energy Management Certified Energy Manager by Bureau of Energy Efficiency (BEE) India (EM 2238) Certified MV Professional by EVO & AEEE	
3.	Experience. (use additional sheet if required)	7 Year experience in Energy audits, conducted 70+ energy audits out of which 30 are in power plants	
4.	Residence(with STD)	+91 9163306126	
5.	Mobile	+91 9163306126	
6	Email address	mrinmoy.kayal@schneider-electric.com	
7	Date of certification as Energy Manager or Energy Auditor (pl specify) by Bureau of Energy Efficiency (BEE) (if not appeared list as nil	15-07-2010	
8	Date of passing the examination in "Energy Performance Assessment for Equipment and Utility Systems"		
9	Examination Registration Number of (i) Energy Manager (ii) "Energy Performance Assessment for Equipment and Utility Systems" (In case of Certified Energy Auditor, please write CEA Registration No.)	EM-2238	
10	Certificate Registration Number of (i) Energy Manager (ii) "Energy Performance Assessment for Equipment and Utility Systems"	No.4119	
Remarks(if any)—Nil			

I hereby state that information furnished above is true and correct to the best of my knowledge.

Place:

Date:

Signature:

Name:

Designation:

*Biodata of Certified Energy Auditor		
1	Name of energy auditor	Raghavendra. Rao. L
2.	Qualifications.	Diploma In Electrical Engineering
3.	Experience. (use additional sheet if required)	14 years of experience out of which 10 Years experience in condition monitoring, harmonic analysis, Power quality & Power audits etc. Specialization in harmonic analysis, design, installation and commissioning of harmonic filters .Conducted about 300 power quality studies in India and abroad..
4.	Residence(with STD)	+91 9611800865
5.	Mobile	+91 9611800865
6	Email address	Raghavendra2.Rao@schneider-electric.com
7	Date of certification as Energy Manager or Energy Auditor (pl specify) by Bureau of Energy Efficiency (BEE) (if not appeared list as nil	Nil
8	Date of passing the examination in "Energy Performance Assessment for Equipment and Utility Systems"	NA
9	Examination Registration Number of (i) Energy Manager (ii) "Energy Performance Assessment for Equipment and Utility Systems" (In case of Certified Energy Auditor, please write CEA Registration No.)	NA
10	Certificate Registration Number of (i) Energy Manager (ii) "Energy Performance Assessment for Equipment and Utility Systems"	NA
Remarks(if any)—Nil		



I hereby state that information furnished above is true and correct to the best of my knowledge.


Place:

Date:

Signature:

Name:

Designation:

*Biodata of Certified Energy Auditor			
1	Name of energy auditor	Manish Thakre	
2.	Qualifications.	B. E in Electrical Engineering Certified Energy Auditor by Bureau of Energy Efficiency (BEE) India EA 15836	
3.	Experience. (use additional sheet if required)	6 Years experience in Energy audits and conducted about 25+ comprehensive assignments in Industrial and Commercial complexes in India, 16 DSM Projects by BEE, 40 electrical safety audits in retail outlets, 35+ Power quality audits and 5 MSC Audits	
4.	Residence(with STD)	+91 9767512644	
5.	Mobile	+91 9767512644	
6	Email address	Manish.thakare@schneider-electric.com	
7	Date of certification as Energy Manager or Energy Auditor (pl specify) by Bureau of Energy Efficiency (BEE) (if not appeared list as nil	February 1, 2013	
8	Date of passing the examination in "Energy Performance Assessment for Equipment and Utility Systems"	February 1, 2013	
9	Examination Registration Number of (i) Energy Manager (ii) "Energy Performance Assessment for Equipment and Utility Systems" (In case of Certified Energy Auditor, please write CEA Registration No.)	5235	
10	Certificate Registration Number of (i) Energy Manager (ii) "Energy Performance Assessment for Equipment and Utility Systems"	EA 15836	
Remarks(if any)--Nil			

I hereby state that information furnished above is true and correct to the best of my knowledge.


Place:

Date:

Signature:

Name:

Designation:

*Biodata of Certified Energy Auditor			
1	Name of energy auditor	G. Baranitharan	
2.	Qualifications.	B.E. in Electrical Engineering Certified Energy Auditor by Bureau of Energy Efficiency (BEE) India EA11847	
3.	Experience. (use additional sheet if required)	8 Years experience out of which 6 years in energy audit and compressed air audits. Conducted 35+ detailed energy audits, 50+ harmonic audits and 120 compressed air audits	
4.	Residence(with STD)	+91 9945512593	
5.	Mobile	+91 9945512593	
6	Email address	baranitharan.gnanamoorthy@schneider-electric.com	
7	Date of certification as Energy Manager or Energy Auditor (pl specify) by Bureau of Energy Efficiency (BEE) (if not appeared list as nil	February 1, 2013	
8	Date of passing the examination in "Energy Performance Assessment for Equipment and Utility Systems"	February 1, 2013	
9	Examination Registration Number of (i) Energy Manager (ii) "Energy Performance Assessment for Equipment and Utility Systems" (In case of Certified Energy Auditor, please write CEA Registration No.)	8835	
10	Certificate Registration Number of (i) Energy Manager (ii) "Energy Performance Assessment for Equipment and Utility Systems"	EA11847	
Remarks(if any)—Nil			

I hereby state that information furnished above is true and correct to the best of my knowledge.

Place:

Date:

Signature:

Name:

Designation:

*Biodata of Certified Energy Auditor		
1	Name of energy auditor	Bindu V Thomas
2.	Qualifications.	B Tech in Electrical Engineering
3.	Experience. (use additional sheet if required)	6+ Years experience in energy audit report writing and report quality check, developing templates for data collection & report writing, condition Monitoring of energy audits
4.	Residence(with STD)	+91 9980549982
5.	Mobile	+91 9980549982
6	Email address	bindu.thomas@schneider-electric.com
7	Date of certification as Energy Manager or Energy Auditor (pl specify) by Bureau of Energy Efficiency (BEE) (if not appeared list as nil	Nil
8	Date of passing the examination in "Energy Performance Assessment for Equipment and Utility Systems"	NA
9	Examination Registration Number of (i) Energy Manager (ii) "Energy Performance Assessment for Equipment and Utility Systems" (In case of Certified Energy Auditor, please write CEA Registration No.)	NA
10	Certificate Registration Number of (i) Energy Manager (ii) "Energy Performance Assessment for Equipment and Utility Systems"	NA
Remarks(if any)—Nil		



I hereby state that information furnished above is true and correct to the best of my knowledge.

Place:

Date:

Signature:

Name:

Designation:

*please attach biodata of all auditors/managers of your firm.