



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

**CERTIFICATE OF EMPANELMENT**

*This is to certify that **M/s. UVK SUSNOMICS ENGINEERING P LTD.** (6 Rajaji Nagar Main Road, Madipakkam, Chennai- 600 091) 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 - 4317 B**


<b>Scope/Area</b>	<b>Building</b>	<b>Industry -Electrical</b>	<b>Industry Thermal</b>
	Yes	No	No

*This empanelment is valid up to 05<sup>th</sup> January 2018*

*Issuing Date: 06/01/2015*

*Place: Thiruvananthapuram*


Director,  
Energy Management Centre - Kerala

		<b>Information of firm</b>
1.	Name & address of the firm	UVK SUSNOMICS ENGINEERING P LTD (Formerly U V Krishna Mohan Rao Associates) 6 RAJAJI NAGAR MAIN ROAD MADIPAKKAM CHENNAI 600 091
	Office(with STD)	(+91 44) 2258 4172, 2258 2565
	Mobile	766 766 4250
	Fax number	
2.	Website (if any)	<a href="http://www.uvka.net">www.uvka.net</a>
3.	Email address	g i r i j a @ u v k a . n e t
4.	Name ,Designation and address of Contact person	Mrs Girija Natarajan Senior Associate 6 Rajaji Nagar Main Road Madipakkam CHENNAI 600 01
5.	Office(with STD)	(+91 44) 2258 4172, 2258 2565
	Residence(with STD)	
	Mobile	(+91) 766 766 4250
6.	Email address	g i r i j a @ u v k a . n e t
7.	Year of establishment	2001
8.	Year of commencement of energy audit by the firm.	2001
9.	No. of branch offices (List of complete addresses including heads of all branch offices with telephone, fax and email addresses)	NA

**Details of Associated Energy Experts and Audits Conducted by firm**

1.	Number of resource persons available	<b>12</b>	
2.	Number of full-time energy auditors in position, with work experience of all energy auditors associated with the firm	<b>11</b>	
3.	No. of part-time energy auditors in position during the current year / previous year associated with the firm.	<b>1</b>	
4.	Sectors in which the energy audit firm has conducted energy audits since inception and number of audits in each sector	Breweries, Buildings, Cement, Pulp & Paper, Fertiliser, Hotels, Textiles, Thermal Power Plants, Iron & Steel	
5.	Energy audit process system (list sectors) - If no energy audit has been carried out of the process system and parameters, please list nil.	Preliminary Phase Detailed audit study Phase Implementation Phase	
6.	Energy audit of thermal utility system (list sectors)	Boiler plants	
7.	Energy audit of electrical utility system (list sectors)	HVAC, Motors, Lighting, Refrigeration Units	
8.	Instruments available	(a) Electrical (list the name of the instruments)	Digital tachometer Contact & non-contact Digital lux meter Surface pitot K type, S & L type Infrared & Digital thermometer Power analysers, TDS meters ALM-10, ALM-30 Digital clamp meter
		(b) Thermal (list the name of the instruments)	Flue gas analyser with probe IR Thermometer Contact type Thermometer Sling Psychrometer Anemometer Pressure Gauge Mano meter Ultra sonic flow meter

**\*Bio data of Certified Energy Auditor**

1	Name of energy auditor	U V Krishna Mohan Rao	
2.	Qualifications.	B.SC Alumnus of IIM Ahmedabad	
3.	Experience. (use additional sheet if required)	40 years	
4.	Residence(with STD)		
5.	Mobile	(+91) 94454 82859 93823 82859	
6	Email address	<a href="mailto:uvkraj@uvka.net">uvkraj@uvka.net</a>	
7	Date of certification as Energy Manager or Energy Auditor (pl specify) by Bureau of Energy Efficiency (BEE) ( if not appeared list as nil		
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.)		
10	Certificate Registration Number of (i) Energy Manager (ii) "Energy Performance Assessment for Equipment and Utility Systems"		
11	Are you a BEE accredited Energy auditor. If so: Date of accreditation Accreditation No.		
<b>Remarks( if any)—UVK Rao CV attached</b>			



**U V Krishna Mohan Rao**, International Expert on Energy & Water Efficiency and Green Business, is an alumnus of **IIM, Ahmedabad** and College of Engineering, **University of Wisconsin, USA**. He is the Director and Chief Executive of UVK Susnomics Engineering Private Limited and President, Society for Energy Engineers and Managers (SEEM), Kerala.

UVK had the unique privilege of associating with the Management Doyen Dr M K Raju for over two decades, concurrently for a decade with Management Guru Prof CK Prahalad for management consultancy. With consulting experience with over a thousand manufacturing and commercial building facilities globally including Bangladesh, China, USA, UK, France, Singapore, Maldives, Nepal, Hungary, Denmark, Sri Lanka, Thailand, Indonesia, UAE, Vietnam, Ivory Coast, Zambia. Mr Rao has been the National Expert for UNDP; Consultant to Asian Development Bank, USAID, United Nations, IFC/ World Bank on Energy Efficiency and Sustainability.

Mr. Rao's company UVK Susnomics Engineering Private Limited (UVKS) approved by **Bureau of Energy Efficiency**, Energy Management Centre, Kerala and rated "High" by CRISIL undertakes the challenge of actual achievement of savings amongst clients. Every third client of UVKS is a recipient of Awards for energy-environmental efficiency excellence both in India and abroad. The client list includes ACC, Amul, Milma, Mother Dairy; Coca-Cola, ITC, Hindustan Unilever, Taj, Hyatt, Marriott, Leela, Le Meridien, Four Seasons, Radisson, Jindal, Wartsila and Murugappa Groups. UVKS's Client Biodiversity Conservation India Limited won the first Platinum Green homes multi-dwelling project in the World !

As an accomplished sustainability specialist, Mr Rao is recipient of several National and international Awards for professional contribution for conservation including:

- India's Best Energy Auditor Award by PCRA
- Best Energy Services Company by Independent Power Producers Association of India
- Association of Energy Engineers USA Award for Asia-Pacific Region for the Best Waste to Wealth Project implemented
- Bry-Air Excellence National Award for best HVAC&R System Design implemented
- Rotary Club Green Chariot Award for Environment Protection

At the personal level, UVK Rao's passion for energy-water-environment conservation is amply reflected in his home "Viswa Syamalam" adjudged amongst first platinum rated Green Homes in India with cent percent solar powered, cent percent rain water harvested and cent percent recycling sewage and home refuse. His family received the Dalmia-Star-Vijay TV Award for their home "Viswa Syamalam", as Best Powered House in Tamil Nadu.


Mr Rao co-authored the **Hand Book on Energy Audit & Management for the Indian Industry** published by Institute of Chartered Accountants of India. He authored the Financial Engineering Chapter for **United Nations book on Energy Efficiency**.

Apart from professional writing, Mr Rao is a motivational speaker for sustainability at public forums like industry associations, chambers of commerce, universities and management schools, IITs and World Bank.


UVKS advises both domestic and international clients on green building concepts and certain clients have received carbon credits under the Clean Development Mechanism (CDM) of the UN protocol. UVKS client, ITC Sonar Bangla, Kolkata is the first and the only Hotel in the World and ITC in the paper sector the first in the world paper sector to earn CERs for energy efficiency.

UVKS are actively involved in Green Business and to date covered over 200 million sq.ft for sustainability consulting including IT Parks, Malls, Hotels, Resorts, Residential and Temple complexes.


**\*Bio data of Certified Energy Auditor**

1	Name of energy auditor	S Arul Mohan	
2.	Qualifications.	M.E	
3.	Experience. (use additional sheet if required)	24	
4.	Residence(with STD)		
5.	Mobile	(+91) 98406 30106	
6	Email address	<a href="mailto:arul@uvka.net">arul@uvka.net</a> ; <a href="mailto:sam_anala@yahoo.com">sam_anala@yahoo.com</a>	
7	Date of certification as Energy Manager or Energy Auditor (pl specify) by Bureau of Energy Efficiency (BEE) ( if not appeared list as nil	26 <sup>th</sup> February 2013  BEE	
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.)	EA-3430	
10	Certificate Registration Number of (i) Energy Manager (ii) “Energy Performance Assessment for Equipment and Utility Systems”	EA-3430	
11	Are you a BEE accredited Energy auditor. If so: Date of accreditation Accreditation No.	YES  26 <sup>th</sup> February 2013 AEA-0050	
<b>Remarks( if any)--Nil</b>			

**\*Bio data of Certified Energy Auditor**


1	Name of energy auditor	M SRINIVASAN	
2.	Qualifications.	AMIE	
3.	Experience. (use additional sheet if required)	19 years	
4.	Residence(with STD)		
5.	Mobile	(+91) 96005 00542	
6	Email address	<a href="mailto:srini@uvka.net">srini@uvka.net</a>	
7	Date of certification as Energy Manager or Energy Auditor (pl specify) by Bureau of Energy Efficiency (BEE) ( if not appeared list as nil	04 March 2014	
8	Date of passing the examination in “Energy Performance Assessment for Equipment and Utility Systems”	August 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.)	EM-4484  CEA – 17707	
10	Certificate Registration Number of (i) Energy Manager (ii) “Energy Performance Assessment for Equipment and Utility Systems”	11257	
11	Are you a BEE accredited Energy auditor. If so: Date of accreditation Accreditation No.	No	
<b>Remarks( if any)--Nil</b>			

**\*Bio data of Certified Energy Auditor**


1	Name of energy auditor	AM IMRAN KHAN	
2.	Qualifications.	B.E	
3.	Experience. (use additional sheet if required)	6	
4.	Residence(with STD)		
5.	Mobile	94456 86927	
6	Email address	<a href="mailto:Imran@uvka.net">Imran@uvka.net</a>	
7	Date of certification as Energy Manager or Energy Auditor (pl specify) by Bureau of Energy Efficiency (BEE) ( if not appeared list as nil		
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.)		
10	Certificate Registration Number of (i) Energy Manager (ii) “Energy Performance Assessment for Equipment and Utility Systems”		
11	Are you a BEE accredited Energy auditor. If so: Date of accreditation Accreditation No.		
<b>Remarks( if any)--Nil</b>			




**\*Bio data of Certified Energy Auditor**


1	Name of energy auditor	S Prem Kumar	
2.	Qualifications.	M.E Energy Engineering	
3.	Experience. (use additional sheet if required)		
4.	Residence(with STD)		
5.	Mobile	97902 86332	
6	Email address	<a href="mailto:prem@uvka.net">prem@uvka.net</a>	
7	Date of certification as Energy Manager or Energy Auditor (pl specify) by Bureau of Energy Efficiency (BEE) ( if not appeared list as nil		
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.)	EA 26002	
10	Certificate Registration Number of (i) Energy Manager (ii) “Energy Performance Assessment for Equipment and Utility Systems”		
11	Are you a BEE accredited Energy auditor. If so: Date of accreditation Accreditation No.		
<b>Remarks( if any)--Nil</b>			

**\*Bio data of Certified Energy Auditor**

1	Name of energy auditor	M AJITH KUMAR	
2.	Qualifications.	M.E ENERGY ENGINEERING	
3.	Experience. (use additional sheet if required)	2 years	
4.	Residence(with STD)		
5.	Mobile	94448 78845	
6	Email address	<a href="mailto:ajith@uvka.net">ajith@uvka.net</a>	
7	Date of certification as Energy Manager or Energy Auditor (pl specify) by Bureau of Energy Efficiency (BEE) ( if not appeared list as nil		
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.)	EA-26003	
10	Certificate Registration Number of (i) Energy Manager (ii) “Energy Performance Assessment for Equipment and Utility Systems”		
11	Are you a BEE accredited Energy auditor. If so: Date of accreditation Accreditation No.		
			<b>Remarks( if any)--Nil</b>


**\*Bio data of Certified Energy Auditor**

1	Name of energy auditor	C SOUNDARARAJAN	
2.	Qualifications.	B.E. ELECTRICAL & ELECTRONICS ENGG.	
3.	Experience. (use additional sheet if required)	9 years	
4.	Residence(with STD)		
5.	Mobile	99442 01817	
6	Email address	<a href="mailto:rajan@uvka.net">rajan@uvka.net</a>	
7	Date of certification as Energy Manager or Energy Auditor (pl specify) by Bureau of Energy Efficiency (BEE) ( if not appeared list as nil		
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.)		
10	Certificate Registration Number of (i) Energy Manager (ii) "Energy Performance Assessment for Equipment and Utility Systems"		
11	Are you a BEE accredited Energy auditor. If so: Date of accreditation Accreditation No.		
<b>Remarks( if any)--Nil</b>			


<b>*Bio data of Certified Energy Auditor</b>			
1	Name of energy auditor	S V DHANANCHEZHIAN	
2.	Qualifications.	B.E ENERGY & ENVIRONMENT ENGINEERING	
3.	Experience. (use additional sheet if required)	3 years	
4.	Residence(with STD)		
5.	Mobile	98844 21433	
6	Email address	<a href="mailto:dhana@uvka.net">dhana@uvka.net</a>	
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”		
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.)		
10	Certificate Registration Number of (i) Energy Manager (ii) “Energy Performance Assessment for Equipment and Utility Systems”		
11	Are you a BEE accredited Energy auditor. If so: Date of accreditation Accreditation No.	No	
<b>Remarks( if any)--Nil</b>			

\*please attach bio data of all auditors/managers of your firm.


**\*Bio data of Certified Energy Auditor**


1	Name of energy auditor	P DEVARAJAN	
2.	Qualifications.	B.E Electrical & Electronics Engg.	
3.	Experience. (use additional sheet if required)	5 years	
4.	Residence(with STD)		
5.	Mobile	90471 05908	
6	Email address	<a href="mailto:raja@uvka.net">raja@uvka.net</a>	
7	Date of certification as Energy Manager or Energy Auditor (pl specify) by Bureau of Energy Efficiency (BEE) ( if not appeared list as nil		
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.)		
10	Certificate Registration Number of (i) Energy Manager (ii) “Energy Performance Assessment for Equipment and Utility Systems”		
11	Are you a BEE accredited Energy auditor. If so: Date of accreditation Accreditation No.		
<b>Remarks( if any)--Nil</b>			

**\*Bio data of Certified Energy Auditor**

1	Name of energy auditor	P N SASISUDHAN	
2.	Qualifications.	B.Tech (ENERGY & ENVIRONMENTAL ENGINEERING)	
3.	Experience. (use additional sheet if required)	1 year	
4.	Residence(with STD)		
5.	Mobile	(+91) 80985 90660	
6	Email address	<a href="mailto:sasi@uvka.net">sasi@uvka.net</a>	
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"		
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.)		
10	Certificate Registration Number of (i) Energy Manager (ii) "Energy Performance Assessment for Equipment and Utility Systems"		
11	Are you a BEE accredited Energy auditor. If so: Date of accreditation Accreditation No.		
<b>Remarks( if any)—Nil</b>			

**\*Bio data of Certified Energy Auditor**

1	Name of energy auditor	SHYAM SRINIVAS	
2.	Qualifications.	Mechanical Engineering	
3.	Experience. (use additional sheet if required)	10 years	
4.	Residence(with STD)		
5.	Mobile	(+91) 99620 11252	
6	Email address	<a href="mailto:sasi@uvka.net">sasi@uvka.net</a>	
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”		
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.)		
10	Certificate Registration Number of (i) Energy Manager (ii) “Energy Performance Assessment for Equipment and Utility Systems”		
11	Are you a BEE accredited Energy auditor. If so: Date of accreditation Accreditation No.		
<b>Remarks( if any)—Nil</b>			

<b>*Bio data of Consultants</b>			
1	Name of energy auditor	B Umesh	
2.	Qualifications.	Diploma in Electrical Engineering	
3.	Experience. (use additional sheet if required)	25 years	
4.	Residence(with STD)		
5.	Mobile	(+91) 98454 84046	
6	Email address	umesh@uvka.net	
7	Date of certification as Energy Manager or Energy Auditor (pl specify) by Bureau of Energy Efficiency (BEE) ( if not appeared list as nil		
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.)		
10	Certificate Registration Number of (i) Energy Manager (ii) "Energy Performance Assessment for Equipment and Utility Systems"		
11	Are you a BEE accredited Energy auditor. If so: Date of accreditation Accreditation No.		
<b>Remarks( if any)--Nil</b>			

\*please attach bio data of all consultants of your firm.

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

Place: CHENNAI  
Date: 18 July 2017

Signature:   
Name: **Mrs Girija Natarajan**  
Designation: **Senior Associate**