

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

CERTIFICATE OF EMPANELMENT

This is to certify that **M/s. Prudent Energy** (Choolakkal Buildings, Door No. 14/1644K, 2nd Floor, Convent Junction, Ernakulam – 682 011) 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- 4017 B

Scope/Area	Building	Industry -Electrical	Industry Thermal
Scope/Area	Yes	MSME & Sea food processing units	MSME & Sea food processing units

This empanelment is valid up to 10^{th} May 2020

Issuing Date: 11/05/2017

Place: Thiruvananthapuram

Director,

Energy Management Centre - Kerala

							Info	orn	na	tion	of	firr	n																			
1.	Name &	add	ress	s of	the	firm						Prudent Energy																				
						"Choolakkal Buildings", Door No. 44/1688K, (Second Floor), Convent Junction, Ernakulam – Pin 682011, Kerala State.																										
	Office(wi	Office(with STD)					C	949	963	34	43102																					
	Mobile											C	949	963	34	43102)															
	Fax num	ber										N	۱IL																			
2.	Website	(if a	any))								<u>v</u>	vwv	<mark>۱.</mark> р۱	rı	unerg	<u>y.cc</u>	<u>om</u>														
3.	Email address	i	n	f	0	@ p	r	ı	u	n	е	r	g	У		. с	0	m														
4.	Name ,Designation and address of Contact person								(I F N	Emp Presi Apar Math	ent tme irap nance"	e Fer ca	E VAR elled E Reside nts" ,He ally , K nt Res (adapp	nerg ntial ouse otha	gy A Add No amar	dre :-(ng Ac	ess D6 ala	s: 6, ar re	- " Ne n –	Kar - 6 :-"	ala S 88	rik uk Ke	kk o S era pp	al Sta ala our	ati a S	Sta n	te	·				
5.	Office(wi	ith S	STD)								Mob:- 09496343102																				
	Residenc	e(v	vith	STD))							09446776673																				
	Mobile											09496343102																				
6.	Email address	i	n	f	0	@ p	r	ı	u	n	е	r	g	У		. с	0	m														
7.	Year of e	stal	olisł	nmer	nt	•	•	•	',	<u>'</u>	•	2	2011				•	•	•	•		•		•								
8.	Year of commencement of energy audit by the firm.						the	2	2011																							
9.	No. of branch offices							2																								
	(List of complete addresses including heads of all branch offices with telephone, fax and email addresses)					- Light Office: Chaplakkal Duildings No. 44/1C00K																										
								E	Encla Cher	ave nnai	, i	Office: 135, F 60009 841829	Pillay 7	ar K																		

	Details of	Associated Energy Expe	rts and	Audits Conducted by firm				
1.	Number of res	source persons available		6				
2.	position, with	II-time energy auditors in work experience of all ors associated with the	4					
3.	position during	ime energy auditors in ng the current year / associated with the firm.	2					
4.		ich the energy audit firm	Food	Processing & Feed	10			
	inception and	ed energy audits since number of audits in each	Manu	facturing				
	sector		Comn	6				
				Total	17			
5.	sectors) - If n	t process system (list o energy audit has been the process system and lease list nil.	Food Processing, Feed Manufacturing & Hospital					
6.	Energy audit of thermal utility system (list sectors)			 Food Processing (Including Spices Industry) Commercial Buildings (Hotels & Hospitals) 				
7.	Energy audit (list sectors)	of electrical utility system	 Food Processing Commercial Buildings (Hospitals, Hotel, Data Centers, IT etc.) 					
8.		(a) Electrical (list the name of the instruments)	•	3 Phase Power Quality Analyz Series-11 (Fluke), USA Single CT Power Quality Anal 345(Fluke), USA Multi meter -115True RMS (Fluke)	yzer-			
	Instruments available	(b) Thermal (list the name of the instruments)	•	Flue Gas Analyzer (330- 2LL(7 Thermal Imager (Ti-32 (Flu Infrared Thermometer (59Max Digital Thermometer (CH403	ıke) (+(Fluke)			
		c) Others	 Anemometer - Ultrasonic Flow Meter – TDM100H HS+H(M& A Inst.Inc) Light /Lux Meter- LM100 (Amprobe) 					

1 Name of energy auditor 2. Qualifications. B.Tech (Mech), Dip. Refrigeration & Air-conditioning , Certificate CNC Machines Programming & Maintenance 3. Experience. (use additional sheet if required) More than 22 Years' of Industrial Experience & Energy Audit (7 Years) 4. Residence(with STD) 9446776673 5. Mobile 9496343102 6 Email varghesekoippuram@gmail.com info@prunergy.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. 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" 10 Certificate Registration Number of (i) Energy Manager (ii) "Energy Manager (iii) "Energy Manager (iiii) "Energy Manager (iiii) "Energy Manager (iiiiiii) "Energy Manager (iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii			*Bio data	of Certifi	ed Energy Auditor	
Refrigeration & Air-conditioning , Certificate CNC Machines Programming & Maintenance 3. Experience. (use additional sheet if required) More than 22 Years' of Industrial Experience & Energy Audit (7 Years) 4. Residence(with STD) 9446776673 5. Mobile 9496343102 6 Email varghesekoippuram@gmail.com info@prunergy.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. 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 Manager (iii) "Energy Performance Assessment for Equipment and Utility Systems" 7233 11 Are you a BEE accredited Energy auditor.	1	Name of er	nergy auditor	GEORG	GE VARGHESE	
sheet if required) Industrial Experience & Energy Audit (7 Years) 4. Residence(with STD) 9446776673 5. Mobile 9496343102 6 Email address varghesekoippuram@gmail.com info@prunergy.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. 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" 7617 (iii) "Energy Performance Assessment for Equipment and Utility Systems" 7233	2.	Qualification	ns.	Refriger	ration & Air-conditioning cate CNC Machines	
5. Mobile 9496343102 6 Email address varghesekoippuram@gmail.com info@prunergy.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. 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" 7617 (ii) "Energy Performance Assessment for Equipment and Utility Systems" 7233	3.	•	•	Industria	al Experience & Energy	
6 Email address varghesekoippuram@gmail.com info@prunergy.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. 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" (ii) "Energy Performance Assessment for Equipment and Utility Systems" 7617 (ii) "Energy Performance Assessment for Equipment and Utility Systems" 11 Are you a BEE accredited Energy auditor. NA	4.	Residence(with STD)	944677	6673	6
address info@prunergy.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. 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" (ii) "Energy Performance Assessment for Equipment and Utility Systems" (In Certificate Registration Number of (ii) Energy Manager (iii) "Energy Performance Assessment for Equipment and Utility Systems" (In Certificate Registration Number of (II) Energy Performance Assessment for Equipment and Utility Systems" (III) Are you a BEE accredited Energy auditor. (III) MA	5.	Mobile		949634	3102	
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" 7617 7233 11 Are you a BEE accredited Energy auditor.	6	-			ail.com	
"Energy Performance Assessment for Equipment and Utility Systems" 9	7	Manager or specify) by Efficiency (E	r Energy Auditor (Bureau of Energy	pl		
(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" 7233 11 Are you a BEE accredited Energy auditor.	8	"Energy Per	formance Assess	ment	6.01.2014	
(i) Energy Manager (ii) "Energy Performance Assessment for Equipment and Utility Systems" 7233 11 Are you a BEE accredited Energy auditor.	9	(i) Energy M (ii) "Energy for Equipme (In case of	lanager Performance Assent and Utility Syst Certified Energy <i>F</i>	essment tems" Auditor,	EA-10883	
for Equipment and Utility Systems" 11 Are you a BEE accredited Energy auditor.	10		_	er of	7617	
auditor.					7233	
Date of accreditation Accreditation No.	11	auditor. If so: Date	of accreditation	ergy	NA	

GEORGE VARGHESE

Post Qualification Experience

Present Status

Company :- M/s Prudent Energy, Ernakulam

Area of Activities:-

- * Energy Auditor
- ***** Food Processing Consultant
- **❖** Chartered Engineer & Govt. Approved Machinery Valuer

Total work Experience more than 22 years

Key Sectors

- ✓ Food Processing
- ✓ Feed manufacturing
- ✓ Plastic Blow & Injection
- ✓ Energy Auditing

Details of few Projects Completed Recently as a "Project Consultant"

(I)Firm:- M/s Hyson Logistics & Marine Foods, Nellore, Andra (Year - 2012-13)

Activities :- Food Processing of Shrimps & Fish

Capacity/Day :- 40 T/Day

Consultancy include

- Design of Plant based on EU, BRC & ISO Standards
- Selection of Machineries
- Erection, Commissioning & Testing of Refrigeration System
- Errection of IOF, Plate and Tunnel Freezers
- Errection of Cold stores, Chill rooms, Anteroom

(II)Firm:- M/s Bustan -Al- Wathaniya, Pallipuram, Cherthala, Alleppey, Kerala (2014-2015)

Activities :- Food Processing of Veg and Non Veg Items

Capacity: 10 T/Day(at present)

Consultancy Include

- Plant Design
- Selection of Machineries
- Erection, Commissioning & Testing of Refrigeration System & Equipment Including Plate and Tunnel Freezers
- Supervision of Electrification work

(III)Firm:- M/s Saffe Panel, Pallipuram, Cherthala, Alleppey, Kerala

Activities :- Manufacturing of Ply wood

Consultancy Include

- Plant Design
- Machinery selection
- Errection of Press, Boilers, Dryers Peeling Machines etc

Previous Work Experience

A) Year – 2003 - 2011

IFL (Innovative Foods Ltd.-An Amalgam Group of Companies)

Post Held:- Manger(Technical & Project)

Area of Activities:-

Operation of

- Freezers Individual Quick Freezers, Tunnel Freezers, Spiral Freezers Plate Feezers for freezing
- Non veg. Items:- Squid, Shrimp, Octopus, Fish & Meat product.
- Vegetable Items:-Tapioca, Cut Vegetables etc.
- > Automatic Breaded Product Line
- Vegetable Products:- Channa Patty, Nuggets, Cutlets, Baby Corn etc
- Non Veg. Products:- Nuggets, Cutlets, Breaded shrimps, Fish Fingers and Fillets etc.
- Maintenance of All Equipments Like Compressors, Condensers, Automatic Moulding lines, Freezers etc.
- Project Handled
 - > Erection and Commissioning of
 - Sea Food Processing Plants
 - Ready to eat & Cook Automatic Breaded Lines

Note:- I have also worked with

a)"TATA Foods" (A Subsidiary of TATA Group) from 2005 & later with a Multinational Group (b)" India Equity Partners" in the year 2009.

B) Year – 2001 - 2003

M/s Higashimaru Pvt. Ltd (A Shrimp Feed Manufacturing Firm- An Amalgam Group)

Post Held:- Deputy Manger Technical

Area of Activities:-

- Operation of Shrimp Feed Plant
- > Inventory Monitoring etc
- ➤ Maintenance support
- C) Year 1999- 2001

ICF (International Creative Foods Ltd.

Post Held:- Deputy Manger (Project)

Area of Activities:-

EU Project :- Project Implementation and handing over the Plant to Hindustan Lever Ltd. after upgrading to European Union Standards.

The activities includes construction of

- New Pre-Processing area, Individual Quick Freezer Modification,
- Additional Electrification work, Complete
- Safety Implementation for the entire plant.
- D) Year 1996-1999

M/s Gesmy Plastic Industries, Chathannoor, Kolam

Own Plastic Manufacturing unit

(Specialization: Manufacturing of Injection and Blow Moulding Items)

E) Year 1992-1996

Worked as Design Engineer at M/S MRF subsidiary (Devon Machines) , Ambattur , Chennai(Tyre Manufacturing Machineries)

		*Bio	tants		
1	Name of ene	ergy auditor	K .V. ABRAHA	AM	
2.	Qualifications	S.	B.E (Electrica	ป)- 1971	
3.	Experience (sheet if requi	use additional red)	Lecturer (1972- (b) M/s KEKE E , Koothattukular (6 months) (c)QETCOS- L	BACON, Edayar m -Tech.Officer Jmayanalloor , nance Engineer Nominated Member -1975- rals & Metals ara, Kollam – (IN - 2003 Electrical	
4.	Residence(with STD)	"Koippuram H Njavaroor , Ch 691572 Ph.No : 0474-	nathanoor – Pin	2
5.	Mobile		9447131099		
6	Email address	No Email id			
7	Energy Audit	ication as Energy Ma for (pl specify) by Bu ency (BEE) (if not a	NA		
8	•	ing the examination in Assessment for Equals	• • •	NA	
9	Examination	Registration Numbe	r of	NA	
	(i) Energy Ma	anager			
	Equipment a (In case of C	Performance Assessr nd Utility Systems" Certified Energy Audi egistration No.)			
10	Certificate Re	egistration Number o	f	NA	
	(i) Energy Ma	anager			
		Performance Assessr nd Utility Systems"			
11	If so: Date of	EE accredited Energy of accreditation editation No.	auditor.	NA	

			*Bio data d	of Consultants	
1.	Name of energy a	uditor	V. I .CHERIAN		
2.	Qualifications.		B.Sc. M.E(Elec	ctrical)- 1970	
	Experience (use ac sheet if required)	dditional	(a)Worked as I 1971-2003- 32 (Retd. as Chie Technical Mem	f Engineer &	
			(b) Worked as (Electrical, Kolla	Chairman , United am	
4.	Residence(with S	STD)	Ph.No : 0469- 2	2732470	
5.	Mobile		9947803923		
6.	Email address	No Ema	ail id		
7.	Date of certification Energy Auditor (pl Energy Efficiency (list as nil	specify) b	y Bureau of	NA	
8.	Date of passing the Performance Asse and Utility Systems	ssment fo		NA	
9.	Examination Regis	tration Nu	umber of	NA	
	(i) Energy Manage	r			
	(ii) "Energy Perform Equipment and Uti (In case of Certifie write CEA Registra	lity Systered Energy	ms"		
10.	Certificate Registra	ation Num	ber of	NA	
	(i) Energy Manage	r			
	(ii) "Energy Perform Equipment and Uti				
11.	Are you a BEE acc If so: Date of accr Accreditation	reditation	nergy auditor.	NA	

		*E	Bio data of	Consultants	
1	Name of ene	ergy auditor	Viswana	athan M.K	
2.	Qualifications).	chanical		
3.	Experience (usheet if require	use additional red)	(a) M/s Sprint.V (b) Man	rs of Experience Hindustan New 'ellor Kottayam. dya National Papper, a RS Karnataka	
4.	Residence(wi	Residence(with STD) Mullasseri No.36/5,Ja Road,Vyti			
5.	Mobile		903788	5880	
6	Email address	kunjikrishnanvis	swanathan@	⊋gmail.com	
7	or Energy Au	cation as Energy ditor (pl specify) b iciency (BEE) (if r as nil	y Bureau	NA	
8	"Energy Perfo	ng the examination ormance Assessm and Utility Systems	nent for	NA	
9	(i) Energy Ma (ii) "Energy P Equipment ar (In case of C	Registration Numb Inager erformance Assest and Utility Systems Pertified Energy Au CEA Registration	ssment for "	NA	
10	(i) Energy Ma	egistration Numbe inager erformance Asses nd Utility Systems	ssment for	NA	
11	auditor. If so: Date o	E accredited Enermoder Encire	rgy	NA	

		*	Bio data of	Consultants	
1	Name of ene	ergy auditor	Manum	on G.Nair	
2.	Qualifications	S.	B.Tech	(EEE)	
3.	Experience (usheet if require	use additional red)	1 Year	in Energy Audit	
4.	Residence(w	ith STD)	House,	aparambil Anniyartholu Ikki Dist.,685515	
5.	Mobile		096563	23944	(3,5)
6	Email address	manupeedika@			
7	or Energy Au	cation as Energy ditor (pl specify) l iciency (BEE) (if as nil			
8	"Energy Perfo	ng the examination ormance Assessr and Utility Systems	ment for	NA	
9	(i) Energy Ma (ii) "Energy P Equipment an (In case of C	Registration Num inager erformance Asse nd Utility Systems ertified Energy A CEA Registration	essment for S" uditor,	NA	
10	(i) Energy Ma	egistration Numbe inager erformance Asse nd Utility Systems	essment for	NA	
11	auditor. If so: Date of	E accredited Ene of accreditation ditation No.	ergy	NA	

		*Bi	o data of	Consultants	
1	Name of ene	ergy auditor	K A Var	ghese	
2.	Qualifications	S.	`	lech.)-1965 siness Management	
3.	Experience (sheet if requi	use additional red)	(1968-2	tor Goa Shipyard Ltd -	
4.				Panampilly Nagar , -Pin 682036 316597	
5.	Mobile		0944703	32247	
6	Email address	kavarghese024@			
7	or Energy Au	ication as Energy M Iditor (pl specify) by ficiency (BEE) (if no as nil	Bureau	NA	
8	"Energy Perf	ing the examination ormance Assessme nd Utility Systems"		NA	
9	(i) Energy Ma (ii) "Energy P Equipment a (In case of C	Registration Number Anager Performance Assess Ind Utility Systems" Certified Energy Aud CEA Registration No	ment for	NA	
10	(i) Energy Ma	egistration Number of anager Performance Assess and Utility Systems"		NA	
11	auditor. If so: Date of	E accredited Energor accreditation editation No.	у	NA	

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

Place: Ernakulam Signature

Date: 03.06.2017 Name: GEORGE VARGHESE
Designation: Certified Energy Auditor