	Information of firm		ation of firm	
1.	Name & address	of the firm	TUV SUD South Asi	a Pvt Ltd
				ustrial Area, Phase-1,
			New Delhi-110020	
	Office(with STD)		+91 11 30889797	
	Mobile		+91 9560055124	
	Fax number		+91 11 30889595	
2.	Website (if any)		www.tuv-sud.in	
3.	Email address	dmin.env@tuv-sud.in		
4.	Name ,Designation and address of Contact person		Tarun Kumar Kushwaha Assistant Manager TUV SUD South Asia Pvt Ltd	
			C-153/1 Okhla Industrial Area, Phase-1, New Delhi-110020	
5.	Office(with STD)		+91 11 30889797	
	Residence(with STD)		+91 9560055124	
	Mobile		+91 9560055124	
6.	Email address	arun.kushwaha@tuv-su	<u>d.in</u>	
7.	Year of establishme	ent	August 1999	
8.	Year of commencement of energy audit by the firm.		2002	
9.	No. of branch offices - (List of complete addresses including heads of all branch offices with telephone, fax and email addresses)		ng heads of all branch	
	HEAD OFFICE Off Saki Vihar Road, Saki Naka, Andheri (East), Mumbai – 400072. Tel: +91-22-30823082 / 9797 Fax: +91-22-30823082 / 9797 Fax: +91-22-30829595 CHENNAI New No. 105, Sreela Terrace, Second Floor,First Main road, Gandhi Nagar, Adyar, Chennai - 600020 Tel.: +91-4424450691 Fax: +91-44-24450692	DELHI LAB C-153/1 Okhla Industrial Estate, Phase -1, New Delhi – 110020 Tel: +91-11-30889611 / 9797 Fax: +91-11-30889595 E-mail: munmun.dandona@tuv- sud.in Ashish.ghasi@tuv-sud.in PUNE E-15-16, Royal Arcade, 4thFloor, Pune - Satara Road Pune - 411043. Tel: +91-20-24378137, 24362942 Telefax: +91-20-24378138	BANGALORE No. 25/2, Shreekanta Mahal, First Cross, Second Floor, Sampige Road, Malleshwaram, Bangalore - 560003. Tel: +91-80-23362113, 23361387 Telefax: +91-80-2336 2113 HYDERABAD 305, 3 rd Floor, Navketan Complex, S. D. Road, Secunderabad – 500003. Tel: +91-40-55321871 Fax: +91-40-55321872	BANGALORE LAB No. A 151/152, 2nd C Main, II Stage, Peenya Industrial Estate, Bangalore - 560 058 Tel: +91-80-39289848 /855 Fax: +91-80-39289820 KOCHI (COCHIN) 34/2294 C3, R. K. Chambers, Mamangalam, Palarivattom, Kochi - 682025 Telefax: +91-484-5598719 Mobile: 098474 45719

RAJKOT 801, Star Chambers, Harihar Chowk, Rajkot - 360001. Telefax: +91-281-2236865	VADODARA (BARODA) 916 - 918, Siddharth Complex R. C. Dutt Road, Vadodara - 390007. Tel: +91-265-2324604 Fax: +91-265-2324605	KOLKATA (CALCUTTA) 230A, A. J. C. Bose Road, Chitrakoot Building, Space No. 27, Kolkata -700020. Tel.: +91-33-22833585 Telefax: +91-33-22833579	MUMBAI LAB Off Saki Vihar Road, Saki Naka, Andheri (East), Mumbai – 400072. Tel: +91-22-30823082 / 9797 Fax: +91-22-30829595
COIMBATORE	NAGPUR	KOLHAPUR	TIRUPUR LAB
42, De Sa Ba Colony,	79, 1 st floor, Navab Kuwa Road,	"Shreeshilp", 2094 'E' ward,	106/2 A, Nehru Street,
West Club Road,	Behind Kelkar Mangal Karyalaya,	Vikram Nagar,	15 - Velampalaym,
Race Course,	Gokulpeth, Nagpur - 440010	Kolhapur – 416005.	Tirupur - 641 652.
Coimbatore - 641018	Tel: 0712-6585360	Telefax: +91-231-2660603 /	Tel: +91-421-3200890 / 1/ 4 / 5
Telefax: +91-422-4389998	Telefax: 0712 - 2554053	2622099	Fax: +91-421-2257559
INDORE	GOA	NASIK	AHMEDABAD
306, D. M. Towers,	115, 1 ST Floor, Building S1,	Sahyadri Houe, F-1, MICO Circle,	305, Shilp Arcade, 3 rd Floor,
21/1Race Course Road,	Novacidade Commercial Complex,	Bhavani Chowk, Trambak Road,	Jodhpur Cross Roads, Satellit
Indore – 452001.	NH 17, Porvorim, Goa – 403 521.	Nasik – 422002.	Ahmedabad-380015.
Tel: +91-731-4226582	Tel: +91-832– 2413831	Tel: +91-253-2580218.	Tel: +91-79-26926141

	Details of Associated Energy Experts and Audits Conducted by firm			
1.	Number of resource persons available	500		
2.	Number. of full-time energy auditors in position, with work experience of all energy auditors associated with the firm	 AJIT HABBU - EA7530 B. DILLIBABU - EA 5985 HIRENKUMAR D SARDHARA - EA-12146 SALIM MIRZA - EA - 11452 VIVEK UTPAL - EA - 6379 		
3.	No. of part-time energy auditors in position during the current year / previous year associated with the firm.	5		
4.	Sectors in which the energy audit firm has conducted energy audits since inception and number of audits in each sector	 > Iron and Steel Sector > Paper and Pulp Sector > Power Plant > Cement Industry > Automobile Industry > Agriculture > Petrochemical Industries > Poly-film Industry > Municipal Sector > Small and Medium Enterprise > Almost all industrial segment. 		
5.	Energy audit process system (list sectors) - If no energy audit has been carried out of the process system and parameters, please list nil.	 > Iron and Steel Sector > Paper and Pulp Sector > Power Plant > Cement Industry > Automobile Industry > Agriculture > Petrochemical Industries > Poly-film Industry 		

			 Municipal Sector Small and Medium Enterprise Almost all industrial segments.
6.	Energy audit of thermal utility system (list sectors)		 > Iron and Steel Sector > Paper and Pulp Sector > Power Plant > Cement Industry > Automobile Industry > Petrochemical Industries > Poly-film Industry > Small and Medium Enterprise > Almost all industrial segment.
7.	Energy audit of electrical utility system (list sectors)		 > Iron and Steel Sector > Paper and Pulp Sector > Power Plant > Cement Industry > Automobile Industry > Agriculture > Petrochemical Industries > Poly-film Industry > Municipal Sector > Small and Medium Enterprise > Almost all industrial segment.
8.	Instruments	(a) Electrical (list the name of the instruments)	Detailed Instrument List is attached.
	available	(b) Thermal (list the name of the instruments)	Detailed Instrument List is attached.

• Please enclose biodata of all Associated Energy Experts in format given below.

LIST OF INSTRUMENT

Sr. No.	Particulars of Instruments	No. of units	Kind and Make	Capacity	Age and Condition
1	3-phase Power and Harmonic Analyser capable of measuring un balanced load with harmonic measurement and data logging facility	1 No.	Make: Yokogawa, Model: CW-240F	0-3000 amp	Age: 1 yr. 7 months Good Condition.
2	3-phase Power and Harmonic Analyser capable of measuring un balanced load with harmonic measurement and data logging facility	1 No.	Make: Energy Explorer, Model: 11100042	0-3000 amp	Age: 1 months Good Condition.
3	3 phase power analyser for balance load with harmonic measurement (NANOVIP)	1 No.	Make: Krycard, Model: NANOVIP- Plus	0-1000 amp	Age: 2 yrs. Good Condition.
4	Digital Ultrasonic Flow meter	1 No.	Make: Dynasonics, Model: DTFX-P	0-12 m/s upto pipe size of 2.5 m	Age: 1 yr.
5	Ultrasonic Water Flow Meter	1 No.	GE		Good Condition
6	Analog Pressure Gauge	1 No.	ALTOP		
7	Anemometer	1 No.	Make: Lutron, Model: AM-4201	0.4-30 m/s	
8	Anemometer	1 No.	Make: Kusam Meco		
9	Lux meter	1 No.	Make: TES- Digital, Model: 1330A	Range (0 - 20,000) lux	Age: 2 yrs. Good Condition.
10	Lux meter	1 No.	Make: LUTRAN LX-101	Range (0 - 20,000) lux	Age: 2 yrs. Good Condition.
11	Lux meter	1 No.	Make: Lutron, Model: AM-4201	Range (0 - 20,000) lux	Age: 1 yrs. Good Condition.
12	Sling type psychrometer	1 No.	JRM thromometer	0-50 C DBT/WBT	Age: 2 yrs. Good Condition.
13	1-phase clamp meter	1 No.	Make: Meco, Model: DT-2250- Hz	0-400 Amp	Age: 2 yrs. Good
14	Digital Tachometer	1 No.	Make: BOBTEK, Model: DT-2238A	2.5 to 9999 rpm	Age: 2 yrs. Good Condition.
15	Insulation Tester [Megger]	1 No.	Make: Nippen	1000V/2000 MOhm	Age: 2 yrs. Good Condition.

16	Earth Tester [Megger]	1 No.	Make: Nippen	0-10 ohms	Age: 2 yrs.
17	Flue Gas Analyser	1 No.	Make: Kane Int. Ltd., Model: Kane 900 Plus		Age: 1 yrs. Good Condition.
18	Earth clamp Tester	1 No.	KYORITSU,model- 4200		Age: 1 yrs. Good Condition.
19	Hioki Battery Tester (3554)	1 No.			Age: 1 yrs. Good Condition.
20	EMF Field Tester	1 No.			Age: 1 yrs.
21	Surface DC Voltmeter	1 No.			Age: 1 yrs.
22	Digital Hygrometer	2No.			
23	Digital Power Analyser	1 No.	Model: MPR6005 Sr. No: 04269		
24	Ultrasonic Distance meter	1 No.	WATCO		
25	IR Thermometer	1 No.	Filuke		
26	Digital Precision Psychrometer	1 No.	extech		
27	Contact Type Thermo Meter	1 No.		Range 40 degree Celsius	
28	Manometer with Pitot Tube	1 No.	Model: EQ-8890A		
29	3 Phase (Single Clamp) Power Meter	3 No.	Kusam Meco 2745 Sr.No. 9994350 & 9994360		

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

Place -Date:... Signature :

Name :

Designation :



- 1. Nam of Firm: TUV SUD South Asia Pvt. Ltd.
- 2. Name of Staff: AJIT HABBU
- **3. Date of Birth**: 10/04/1981
- **4. Nationality**: INDIAN
- 5. Education:

Name of Course	University/Board	Institute	Year of Completion
Post Graduate Diploma in Steam Engineering	NA	Forbes Marshall Pvt. Ltd. Pune	2003
Master in Business Administration	ICFAI	Institute of Chartered Financial Analysts of India	Appeared
Bachelor of Engineering, degree in Mechanical Engineering	BAMU	MIT, Aurangabad	2002
Diploma in Mechanical Engineering	MSBTE	Govt. Polytechnic College Nanded	2009

6. Membership of Professional Associations: NA

- 7. Training: Technical Training related to Steam & Thermal Engineering
- 8. Certification (if any): Certified Energy Auditor Certification No (if any): EA7530
- 9. Special Licence/authorisation: NA
- 10. Countries of Work Experience: India, Philippines, UAE

11. Work Experience with Central Government/State Government:

- ✓ Hindustan Petrochemical Corporation Ltd. Vizag, Andhra Pradesh Steam System mgmt.
- ✓ Chennai Petrochemical Corporation Ltd. Chennai Tamilnadu Steam & Condensate System Assessment
- ✓ Adani Wilmar Ltd. Mundra Gujrat. Energy Efficiency Project
- ✓ IFFCO Paradeep Orissa. Energy Efficiency in steam & condensate system
- ✓ Reliance Ind. Ltd Jamnagar Gujrat. Energy Efficiency in steam & condensate system
- ✓ Indian Oil Corporation Ltd. Mathura UP Energy Efficiency in steam & condensate system
- Indian Oil Corporation Ltd. AOD Digboi Assam Energy Efficiency in steam & condensate system
- ✓ RIL Patalganga Energy Efficiency in steam & condensate system
- ✓ Andhra Paper Mills Ltd. Rajahmundry AP Energy Efficiency in steam & condensate system
- ✓ Deepak Fertilizers & PC Ltd. Mumbai Energy Efficiency in steam & condensate system
- ✓ HPCL Mahul Mumbai Energy Efficiency in steam & condensate system
- **12. Sector Specific Experience:** Thermal Energy Audits, Steam & Condensate System Assessment in OPC sector.

13. La	nguages:
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Language	Read	Write	Speak
English	Yes	Yes	Yes
Hindi	Yes	Yes	Yes
Marathi	Yes	Yes	Yes
Kannada	No	No	Yes

14. Expertise: Thermal Energy - Boilers, Steam & Condensate Systems etc.

15. Employment Record:



Name of Employer: TUV SUD South Asia, Pune

Position Held: Regional Manager – Energy & Environment Services

Summary: • Energy efficiency studies at Power plants, co-generation plants, specific energy consumption, baseline establishment, and energy conservation measures etc.

• To Conduct Energy Audits and Steam System Management Projects, preparation of Reports, Savings Documentations, Presentation, and Implementation action plans etc. as a part of Energy Projects.

• Developing new products specific to steam intensive industries.

• Carrying out scoping studies, preparation of proposals, discussions, presentations etc. at the customer end.

From: Jan 2006

To: Aug 2009

Name of Employer: Forbes Marshall Pvt. Ltd. Pune

Position Held: Energy Auditor & Product Manager (2009)

Summary: Forbes Marshall is a group of companies having expertise in their relative field of Energy Conservation and Process efficiency along with Control Instrumentations. Having tied up with Spirax-Sarco UK, Forbes Marshall is providing solutions engineering to Steam System. Have got widest range of products and services packages (more than 1000) in the field and presence in overseas.

Key Responsibilities (Key Result Areas) & Accomplishments

• To Conduct Energy Audits and Steam System Management Projects, preparation of Reports, Savings Documentations, Presentation, and Implementation action plans etc. as a part of Energy Projects.

• Planning, scheduling, execution, presentation of the various services as per the diverse requirements and deadlines.

• Team leader for the Oil and Petrochemical Industry group wherein major focus services include Steam System and Condensate Recovery Network Assessment Study at various OPC refineries across India as HPCL's, IOCI's, RIL etc.

• Working on marketing projects for 8 new service products in the Energy Industry Sector. Portfolio Management of Utilities being one of them.

• Business Potential study with branches and target settings for every month.

• Referencing various sites with good and notable achievements by publishing success stories and savings documents.

• Preparing various marketing tools for sales force as industry specific mailers, application notes, articles for magazines etc.

• Studying the potential for CDM (Clean Development Mechanism) projects for carbon benefits for the existing and up-coming Energy Conservation Projects. PDD preparation, complete CDM project approval procedures and cycle.

• Carrying out scoping studies, preparation of proposals, discussions, presentations etc. at the customer end.

• Receivables management with periodic follow-ups and communications.

From: Mar 2004

To: Sep 2005

Name of Employer: Ramsons Garments Finishing Equipments Pvt. Ltd. Bangalore

Position Held: Project Manager

Summary: Ramsons is providing energy and design solutions to Garment Industries. It manufactures export-oriented garments finishing equipments and machines as Industrial Washing m/c, Tumble Driers, Ironing systems, small capacity Boilers, Fabric Inspection machine etc. along with various service packages.

Key Responsibilities (Key Result Areas) & Accomplishments

• Installation, erection and commissioning of various machines like, Industrial Washing machines Tumble drivers etc



• Selection, sizing, Installation of small capacity boilers for garment industries.

• Energy Audit Projects and technical discussions with the customer for implementation assistance and assessment.

• Installation of Steam pipe lines, Water lines, air lines, gas Lines for the utilities required for the machines.

- Making Plant layout on Auto CAD, suggestions for expansion project
- Making detail BOQ's for the project material and arrangement of various resources like manpower etc.
- Design of steam pipelines and water lines, selection of valves, steam traps etc.
- Ducting installation with scrubbers and blowers for Driers etc.
- Documentation required for all above works.
- Receivable management invoicing and collections.

From: July 2003

To: Feb 2004

Name of Employer: S S Engineers Pvt. Ltd. Pune

Position Held: Design Engineer

Summary: S S Engineers undertake all Sugar and Chemical industry projects with Co-generation. Erection & Commissioning of Water tube Boilers, turbines, Steam line distribution and other utilities designs.

- Preparing drawings of various boiler parts on Auto CAD as per the details given
- Line sizing, P & I diagrams
- Exposure to design standards as IS, BS, ASTM, DIN, etc.
- Making BOQ's and other Documents
- Selection of various types of steam traps and Valves
- Use of Energy conservation techniques
- Visits to sites, making steam layout etc.

11. Detailed Tasks Assigned	12. Work Undertaken that Best Illustrates Capability to Handle the Tasks Assigned		
	Name of assignment or project: HPCL Mahul Mumbai – Energy Efficiency in steam & condensate system		
	Year: 2009		
	Location: Mahul, Mumbai		
	Client: HPCL		
	Main Project Features: Steam & Condensate System Management at Refinery		
	Positions held: Project Manager – Energy Efficiency		
	Activities performed: Energy Efficiency assessment, savings potential identification, measurements, monitoring of proposed system, root cause analysis etc. To Conduct Energy Audits and Steam System Management Projects, preparation of Reports, Savings Documentations, Presentation, and Implementation action plans etc. as a part of Energy Projects.		
	•Planning, scheduling, execution, presentation of the various services as per		
	the diverse requirements and deadlines.		
	•Team leader for the Oil and Petrochemical Industry group wherein major focus services include Steam System and Condensate Recovery Network Assessment Study at various OPC refineries across India as HPCL's, IOCI's, RIL etc.		



Name of assignment or project: Deepak Fertilizers & PC Ltd. Mumbai – Energy Efficiency in steam & condensate system
Year: 2007
Location: Taloja, Mumbai
Client: DFPCL
Main Project Features: Steam & Condensate System Management at Refinery
Positions held: Project Manager – Energy Efficiency
Activities performed: Energy Efficiency assessment, savings potential identification, measurements, monitoring of proposed system, root cause analysis etc. To Conduct Energy Audits and Steam System Management Projects, preparation of Reports, Savings Documentations, Presentation, and Implementation action plans etc. as a part of Energy Projects.
•Planning, scheduling, execution, presentation of the various services as per
the diverse requirements and deadlines.
•Team leader for the Oil and Petrochemical Industry group wherein major focus services include Steam System and Condensate Recovery Network Assessment Study at various OPC refineries across India as HPCL's, IOCI's, RIL etc.
Name of assignment or project: Andhra Paper Mills Ltd. Rajahmundry AP – Energy Efficiency in steam & condensate system
Year: 2008
Location: Rajahmundry AP
Client: APML
Main Project Features: Steam & Condensate System Management at Refinery
Positions held: Project Manager – Energy Efficiency
Activities performed: Energy Efficiency assessment, savings potential identification, measurements, monitoring of proposed system, root cause analysis etc. To Conduct Energy Audits and Steam System Management Projects, preparation of Reports, Savings Documentations, Presentation, and Implementation action plans etc. as a part of Energy Projects.
•Planning, scheduling, execution, presentation of the various services as per
the diverse requirements and deadlines.
•Team leader for the Oil and Petrochemical Industry group wherein major focus services include Steam System and Condensate Recovery Network Assessment Study at various OPC refineries across India as HPCL's, IOCI's, RIL etc.
Name of assignment or project: RIL – Patalganga – Energy Efficiency in
steam & condensate system
Year: 2008
Location: Patalganga, Mumbai
Client: RIL
Main Project Features: Steam & Condensate System Management at Refinery
Positions held: Project Manager – Energy Efficiency



Activities performed: Energy Efficiency assessment, savings potential identification, measurements, monitoring of proposed system, root cause analysis etc. To Conduct Energy Audits and Steam System Management Projects, preparation of Reports, Savings Documentations, Presentation, and Implementation action plans etc. as a part of Energy Projects.
•Planning, scheduling, execution, presentation of the various services as per
the diverse requirements and deadlines.
•Team leader for the Oil and Petrochemical Industry group wherein major focus services include Steam System and Condensate Recovery Network Assessment Study at various OPC refineries across India as HPCL's, IOCI's, RIL etc.
Name of assignment or project: HIndian Oil Corporation Ltd. AOD Digboi Assam – Energy Efficiency in steam & condensate system
Year: 2008
Location: Digboi, Assam
Client: IOCL, AOD
Main Project Features: Steam & Condensate System Management at Refinery
Positions held: Project Manager – Energy Efficiency
Activities performed: Energy Efficiency assessment, savings potential identification, measurements, monitoring of proposed system, root cause analysis etc. To Conduct Energy Audits and Steam System Management Projects, preparation of Reports, Savings Documentations, Presentation, and Implementation action plans etc. as a part of Energy Projects.
•Planning, scheduling, execution, presentation of the various services as per
the diverse requirements and deadlines.
•Team leader for the Oil and Petrochemical Industry group wherein major focus services include Steam System and Condensate Recovery Network Assessment Study at various OPC refineries across India as HPCL's, IOCI's, RIL etc.
Name of assignment or project: Indian Oil Corporation Ltd. Mathura UP –
Energy Efficiency in steam & condensate system
Year: 2008
Location: Mathura, UP
Client: IOCL, Mathura
Main Project Features: Steam & Condensate System Management at Refinery
Positions held: Project Manager – Energy Efficiency
Activities performed: Energy Efficiency assessment, savings potential identification, measurements, monitoring of proposed system, root cause analysis etc. To Conduct Energy Audits and Steam System Management Projects, preparation of Reports, Savings Documentations, Presentation, and Implementation action plans etc. as a part of Energy Projects.
•Planning, scheduling, execution, presentation of the various services as per
the diverse requirements and deadlines.
•Team leader for the Oil and Petrochemical Industry group wherein major focus services include Steam System and Condensate Recovery Network Assessment Study at various OPC refineries across India as HPCL's, IOCI's, RIL etc.



Name of assignment or project: Reliance Ind. Ltd Jamnagar Gujrat. – Energy Efficiency in steam & condensate system
Year: 2008
Location: Jamnagar, Gujarat
Client: RIL
Main Project Features: Steam & Condensate System Management at Refinery
Positions held: Project Manager – Energy Efficiency
Activities performed: Energy Efficiency assessment, savings potential identification, measurements, monitoring of proposed system, root cause analysis etc. To Conduct Energy Audits and Steam System Management Projects, preparation of Reports, Savings Documentations, Presentation, and Implementation action plans etc. as a part of Energy Projects.
•Planning, scheduling, execution, presentation of the various services as per
the diverse requirements and deadlines.
•Team leader for the Oil and Petrochemical Industry group wherein major focus services include Steam System and Condensate Recovery Network Assessment Study at various OPC refineries across India as HPCL's, IOCI's, RIL etc.
Name of assignment or project: IFFCO Paradeep Orissa. – Energy Efficiency
in steam & condensate system
Year: 2007
Location: Paradeep, Orissa
Client: IFFCO
Main Project Features: Steam & Condensate System Management at Refinery
Positions held: Project Manager – Energy Efficiency
Activities performed: Energy Efficiency assessment, savings potential identification, measurements, monitoring of proposed system, root cause analysis etc. To Conduct Energy Audits and Steam System Management Projects, preparation of Reports, Savings Documentations, Presentation, and Implementation action plans etc. as a part of Energy Projects.
•Planning, scheduling, execution, presentation of the various services as per
the diverse requirements and deadlines.
•Team leader for the Oil and Petrochemical Industry group wherein major focus services include Steam System and Condensate Recovery Network Assessment Study at various OPC refineries across India as HPCL's, IOCI's, RIL etc.
Name of assignment or project: Adani Wilmar Ltd. Mundra Gujrat. – Energy Efficiency Project
Year: 2007
Location: Mundra, Gujarat
Client: AWL
Main Project Features: Steam & Condensate System Management at Refinery
Positions held: Project Manager – Energy Efficiency



Activities performed: Energy Efficiency assessment, savings potential identification, measurements, monitoring of proposed system, root cause analysis etc. To Conduct Energy Audits and Steam System Management Projects, preparation of Reports, Savings Documentations, Presentation, and Implementation action plans etc. as a part of Energy Projects.
•Planning, scheduling, execution, presentation of the various services as per
the diverse requirements and deadlines.
•Team leader for the Oil and Petrochemical Industry group wherein major focus services include Steam System and Condensate Recovery Network Assessment Study at various OPC refineries across India as HPCL's, IOCI's, RIL etc.
Name of assignment or project: Chennai Petrochemical Corporation Ltd. Chennai Tamilnadu – Steam & Condensate System Assessment
Year: 2006
Location: Chennai, TN
Client: CPCL
Main Project Features: Steam & Condensate System Management at Refinery
Positions held: Project Manager – Energy Efficiency
Activities performed: Energy Efficiency assessment, savings potential identification, measurements, monitoring of proposed system, root cause analysis etc. To Conduct Energy Audits and Steam System Management Projects, preparation of Reports, Savings Documentations, Presentation, and Implementation action plans etc. as a part of Energy Projects.
•Planning, scheduling, execution, presentation of the various services as per
the diverse requirements and deadlines.
•Team leader for the Oil and Petrochemical Industry group wherein major focus services include Steam System and Condensate Recovery Network Assessment Study at various OPC refineries across India as HPCL's, IOCI's, RIL etc.
Name of assignment or project: Hindustan Petrochemical Corporation Ltd. Vizag, Andhra Pradesh – Steam System mgmt.
Year: 2006
Location: Visakhapatnam, AP
Client: HPCL
Main Project Features: Steam & Condensate System Management at Refinery
Positions held: Project Manager – Energy Efficiency
Activities performed: Energy Efficiency assessment, savings potential identification, measurements, monitoring of proposed system, root cause analysis etc. To Conduct Energy Audits and Steam System Management Projects, preparation of Reports, Savings Documentations, Presentation, and Implementation action plans etc. as a part of Energy Projects.
•Planning, scheduling, execution, presentation of the various services as per
the diverse requirements and deadlines.
•Team leader for the Oil and Petrochemical Industry group wherein major focus services include Steam System and Condensate Recovery Network Assessment Study at various OPC refineries across India as HPCL's, IOCI's, RIL etc.



I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes me, my qualifications and my experience. I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engaged.



Signature of Candidate



- 1. Nam of Firm: TUV SUD South Asia Pvt. Ltd.
- 2. Name of Staff: B. DILLIBABU
- **3. Date of Birth**: 01/12/1980
- **4. Nationality**: INDIAN

5. Education:

of Baubation.			
Name of Course	University/Board	Institute	Year of Completion
B.E (EEE)	Madras University	Sri Ram Engg College	2003
PG Diploma in Energy	-	Small Industries	2003
Management &		Service Institute (SISI	
Conservation), Guindy, Chennai.	

- 6. Membership of Professional Associations: NA
- 7. Training: NA
- 8. Certification (if any): Energy Auditor & LEED AP Certification No (if any): EA 5985
- 9. Special Licence/authorisation: Nil
- 10. Countries of Work Experience: India
- 11. Work Experience with Central Government/State Government: Nil
- **12. Sector Specific Experience:** Aluminium, Steel Re-rolling, Tea, Foundry, Rubber, Chemical, Pharmaceutical, Food, Building, Textiles, Automobile

13.	Languages:

Language	Read	Write	Speak
English	YES	YES	YES
Hindi	NO	NO	YES
Tamil	YES	YES	YES
Telugu	NO	NO	YES

14. Expertise: Thermal & Electrical Energy Audit, Renewable such as Solar, Wind & Biomass Feasibility Studies, Green Building Consultancy

15. Employment Record:

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From: Aug 2009
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To: Till Date

Name of Employer: TUV SUD South Asia

Position Held: Regional Manager

Summary: Energy Audit, Business Development, Solar Consultant, Green Building Consultant

From: Aug 2008 To: July 2009

Name of Employer: Conserve Consultants Pvt. Ltd

Position Held: Manager

Summary: Energy Audit, Commissioning, Green Building Facilitation, Business Develpment



From: Aug 2006 To: July 2008

Name of Employer: Andhra Pradesh Productivity Council (APPC)

Position Held: Assistant Director.

Summary: Energy Audit, Energy Awareness Programme, Energy Conventions,

From: Aug 2003

Name of Employer: Institute for Energy Studies (IES), Anna University

To: July 2006

Position Held: Project Associate

Summary: Energy Audit, Biomass / Fuel Assessment Study, Solar Inspection, Integrated Rural Energy Planning, Feasibility Studies for Solar, Wind & Biomass.

11. Detailed Tasks Assigned	12. Work Undertaken that Best Illustrates Capability to Handle the Tasks Assigned		
	Name of assignment or project: Energy Audit at Aluminium Cluster		
	Year: 2003		
	Location: Vyasarpadi Industrial Estate, Chennai		
	Client: Small Industries Services Institute (SISI), Chennai		
	Main Project Features: Efficiency of Heat Treatment Furnace assessment and melting efficiency.		
	Positions held: Project Leader		
	Activities performed: Detailed Thermal and Electrical Energy Audit		
	Name of assignment or project: Energy Audit at Foundry		
	Year: 2004		
	Location: Thirvottriyur		
	Client: KCP Industries		
	Main Project Features: Electrical Arc & Induction Furnace		
	Positions held: Project Leader		
	Activities performed: Detailed Electrical Energy Audit		
	Name of assignment or project: Energy Audit at Steel Re - rolling Year: 2005		



Location: Madurandagam
Client: Ispat India Pvt. Ltd
Main Project Features: Heat Treatment Furnace Efficiency
Positions held: Project Leader
Activities performed: Detailed Thermal and Electrical Energy Audit
Name of assignment or project: Energy Audit at Engineering Industry
Year: 2006
Location: Sholinghar
Client: Turbo Energy Limited
Main Project Features: Demand Side Management, optimizing the operational practice and motor efficiency
Positions held: Project Leader
Activities performed: Detailed Electrical Energy Audit
Name of assignment or project: Energy Audit at Chemical Industry
Year: 2008
Location: Cuddalore
Client: Tantech agro chemicals limited
Main Project Features: Boiler Study, Compressor Audit
Positions held: Project Leader
Activities performed: Detailed Thermal and Electrical Energy Audit
Name of assignment or project: Energy Audit at Rubber Industry
Year: 2010
Location: Hyderabad
Client: Pelican Rubber Ltd
Main Project Features: Boiler, Steam, Compressor & motor audit
Positions held: Project Leader
Activities performed: Detailed Thermal and Electrical Energy Audit
Name of assignment or project: Energy Audit at Workshops
Year: 2011
Location: Chennai & Bangalore
Client: Maruti Main Service Center & Workshop



Main Project Features: Compressor Audit
Positions held: Project Leader
Activities performed: Detailed Electrical Energy Audit



I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes me, my qualifications and my experience. I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engaged.

Signature of Candidate



- 1. Nam of Firm: TUV SUD South Asia Pvt. Ltd.
- 2. Name of Staff: HIRENKUMAR D SARDHARA
- **3. Date of Birth**: 04/09/1983
- 4. Nationality: INDIAN

5. Education:

Name of Course	University/Board	Institute	Year of Completion
Bachelor of	Sardar Patel	G.H.Patel College of	2007
Engineering -	University	Engineering &	
Mechanical		Technology	

6. Membership of Professional Associations: None

- 7. Training: 1. Energy Efficiency in Thermal Power Plant by SIRI Energy, Hyderabad.
 - **2**. Steam Engineering & Condensate Recovery by Thermax Limted, Pune

8. Certification (if any):BEE Certified Energy Auditor Certification No (if any): EA-12146

9. Special Licence/authorisation: None

10. Countries of Work Experience: India Only

11. Work Experience with Central Government/State Government:

- 1. Agriculture Demand Side Management Project by BEE, Ministry of Power
- 2. Perform, Achieve & Trade Scheme by BEE, Ministry of Power

12. Sector Specific Experience:

Thermal & Electrical Energy Audit in Co-generation, Thermal Power Plant, Chemical, Cement, Pharmaceutical, Petroleum, Commercial Complex, Hotel, Hospital, Food, Distilleries, Ceramic, Textile, Paper & Pulp, Etc.

13. Languag	ges:		
Language	Read	Write	Speak
English	YES	YES	YES
Hindi	YES	YES	YES
Gujarati	YES	YES	YES

14. Expertise: Thermal & Electrical Audits, Steam & Condensate Recovery Audit.



15. Employment Record:

From : June 2012	To: Till Date	
Name of Employer: TUV SUD South Asia Pvt. Ltd.		
Position Held: Sr. Energy Auditor		
Summary: To Conduct Thermal & Elect	trical Energy Audit	
From: April 2010	To: June 2012	
Name of Employer: Thermax Limited, I	Pune	
Position Held: Executive – Energy Aud	it	
Summary: To Conduct Thermal, Electr	ical and Steam & Condensate Recovery Audits	
From: April 2009	To: March 2010	
Name of Employer: MICON Consultant	cy Services Ltd., Pune	
Position Held: Project Consultant		
Summary: To Conduct Thermal and Ele	ectrical Audits	
From : May 2007	To: March 2009	
Name of Employer: Academy for Conservation of Energy, Vadodara		
Position Held: Assistant Energy Auditor		
Summary: To Conduct Thermal and Electrical Energy Audits		

11. Detail	12.Work Undertaken that
To Conduct Site-Visits, Observation & Measurements of	Name of assignment or
Agriculture Pumps, Survey of Cropping Pattern,	project: Agriculture
Preparation of the Detailed Project Report including	Demand Side
recommendation on energy efficient pumps and	Management
financial model for implementation on the same through ESCo	Year: 2009-10
	Location: Gujarat
	Client: Bureau of Energy Efficiency
	Main Project Features: Performance Assessment



	of Agriculture Pumps
	Positions held: Team Leader
	Activities performed: To Conduct Site-Visits, Observation & Measurements of Agriculture Pumps, Survey of Cropping Pattern, Preparation of the Detailed Project Report including recommendation on energy efficient pumps and financial model for implementation on the same through ESCo
To conduct baseline energy audit of Designated Consumers in Textile and Paper & Pulp Sector, Preparation of the Report and Submission of the report	Name of assignment or project: Perform Achieve & Trade
in pre-defined format	Year: 2011-12
	Location: Punajb & Uttarakhand
	Client: Energy Efficiency Services Limited
	Main Project Features: To Conduct Baseline Energy Audit
	Positions held: Team Member
	Activities performed: To conduct baseline energy audit of Designated Consumers in Textile and Paper & Pulp Sector, Preparation of the Report and Submission of the



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Rejamas

Signature of Candidate



- 1. Nam of Firm: TUV SUD South Asia Pvt. Ltd.
- 2. Name of Staff: SALIM MIRZA
- **3. Date of Birth**: 25/04/1982
- 4. Nationality: INDIAN

5. Education:

o. Baucation.			
Name of Course	University/Board	Institute	Year of Completion
B TECH	UPTEC, LUCKNOW	KNIT, SULTANPUR	2006
MECHANICAL			
DIPLOMA IN	ALIGARH	AMU,ALIGARH	2003
MECHANICAL	UNIVERSITY		

- 6. Membership of Professional Associations:
- 7. Training:
- 8. Certification (if any): BEE CERTIFIED Certification No (if any): EA 11452
- 9. Special Licence/authorisation:
- 10. Countries of Work Experience: CONDUCTED THERMAL AUDITS IN EGYPT, SRI LANKA, BANGLADESH AND NEPAL FOR PROCESS INDUSTRIES SUCH AS TEXTILES, TOBACCO, CARBON BLACK ETC.

11. Work Experience with Central Government/State Government:

12. Sector Specific Experience: THERMAL AUDITS, STEAM & CONDENSATE SYSTEM, UTILITY DESIGN ENGINEERING, IMPROVING SPECIFIC FUEL AND STEAM CONSUMPTION FOR VARIOUS PROCESS INDUSTRIES SUCH AS PAPER, TEXTILES, SOLVENT EXTRACTION, EDIBLE OIL REFINERY, CHEMICAL, FOOD, STEEL ETC.

13. Languag	ges:		
Language	Read	Write	Speak
English	YES	YES	YES
Hindi	YES	YES	YES
Other			

14. Expertise: PROCESS SPECIFIC THERMAL AUDITS – BENCHMARKING SPECIFIC FUEL AND SPECIFIC STEAM CONSUMPTION

15. Employment Record:



From: APRIL 2007

To: NOVEMBER 2011

Name of Employer: FORBES MARSHALL PVT LTD

Position Held: ENERGY AUDITOR

Summary: CONDUCTING PROCESS SPECIFIC THERMAL AUDITS, UTILITY DESIGN ENGINEERING, BENCHMARKING OF SPECIFIC STEAM AND FUEL CONSUMPTION, STEAM SYSTEM MANAGEMENT

From: DECEMBER 2011

To: JULY 2012

Name of Employer: CII AVANTHA CENTRE, CHANDIGARH

Position Held: COUNSELLOR - ENERGY

Summary: THERMAL AND ELECTRICAL AUDITS, CONDUCTING TRAINING PROGRAMS

11.Detailed Tasks Assigned (Please	e 12.Work Undertaken that Best Illustrates Capab	
Individually handling detailed	Name of assignment or project: Thermal energy	
thermal audit assigments since	audit and steam turbine performance study with	
starting of my career in Forbes	respect to steam loading and mass balance	
Marshall. Successfully conducted more than 80 energy audits in	Year: July 2007	
individual capacity. Scope of	Location: Pune	
work included collection of data	Client: Alkyl Amines	
at site, preparation of reports, presentation of energy audit findings and acceptance from the plant team. Development of implementation plan with prioritising of proposals and financial investment	Main Project Features: Detailed steam and condensate system audit, steam turbine performance study w.r.t to steam loading pattern, mistatch between steam and electrical demand, eliminate problem of steam venting Positions held: Lead Auditor	
required.Also been associated with providing implentation support, tracking benefits and sustaining of projected savings in savings performance contract.	Activities performed: Site work for data collection, analysis, preparation of audit report with various options for improving system efficiency.	



In CII most of the audits conducted in form of a team. My		
scope of work was to conduct the thermal part of the audit and	Year: January 2008	
also focussing on electrical	Leasting, Doli Doiosthon	
audits. In addition to the above	Client: 9 textile mills in Pali area	
the focus was to provide to sector specific knowledge to the team both in terms of	Main Project Features: Steam and condensate system audit, thermic fluid system audit	
utility, process and product		
knowledge of various acccessories used in steam and condensate system.	Activities performed: Collection of data at site, preparation of reports, comparison of process parameters, preparation of implementation plan and prioritizing.	

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes me, my qualifications and my experience. I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engaged.

Signature of Candidate (Attached Digital Signature)

Signature of authorised representative for the proposal (do not remove, it will be added later)



- 1. Nam of Firm: TUV SUD South Asia Pvt. Ltd.
- 2. Name of Staff: VIVEK UTPAL
- **3. Date of Birth**: 15/12/1980
- 4. Nationality: Indian

5. Education: Bachelor of Technology in Electrical Engineering

Name of Course	University/Board	Institute	Year of Completion
B.Tech-Electrical	National Institute of	National Institute of	2006
Engineering	Tehnology,	Technology,	
	Hamirpur, H.P.	Hamirpur, H.P.	
Intermediate of	B.I.E.C., Patna,	D.B.M.I. College,	1997
Science	Bihar	Mansurchak,	
		Begusarai Bihar.	
Marticulation	B.S.E.B, Patna,	N.N.S.H.School,	1995
	Bihar	Mansurchak,	
		Begusarai, Bihar.	

- 6. Membership of Professional Associations:
- 7. Training:
- **8. Certification (if any)**:BEE Certified Energy Auditor **Certification No (if any)**: 6379
- 9. Special Licence/authorisation:
- 10. Countries of Work Experience: India
- 11. Work Experience with Central Government/State Government: NIL
- 12. Sector Specific Experience: Steel, & Steel rolling, Electrical & Thermal Utilities,

10. Daliguag	çes.		
Language	Read	Write	Speak
English	YES	YES	YES
Hindi	YES	YES	YES
Other			

- 13. Languages:
- **14. Expertise:** Electrical & Thermal Utilities, Electrical & Mechanical Maintenence.
- **15. Employment Record**: (specify all experience since starting in chronological order)

From: 10th July 2006 **To:** 2nd May 2011

Name of Employer: Tube Investments of India Ltd. (Murugappa Group)

Position Held: GET, Dy. Manager, Manager.



Summary: Maintenance, Projects, Energy Conservation, Liaisioning with Govt. Agencies.

From: 10th May 2011**To:** 24th March 2012

Name of Employer: ARC Engineers & Contractors, Pune, Maharashtra.

Position Held: Manager - Electrical & Energy

Summary: Electrical Energy Audits, Projects Planning & Execution

From: 26th March 2012**To:** 16th July 2012

Name of Employer: ABS Consulting, Mumbai, Maharashtra.

Position Held: Sr. Engineer Energy Audit

Summary: Energy Audit, Liasioning with Energy Development Agency, Third Party Inspection.

11. Deta	il 12.Work Undertaken that
	Name of assignment or project: Improvement of Power Quality & maintainance of Power Factor.Year: 2008Location: Pune
	Client: Tube Investments of India Ltd. (In House Project)
	Main Project Features: Harmonic Analysis, Replacement of Capacitor Bank & commissioning of Harmonic Filter
	Positions held: Dy. Manager



Activities performed: Harmonic Analysis, Design of Harmonic Filter, preparation of CEP, Vendor development, Installation & Commissioning.
Name of assignment or project: Maintaining Maximum Demand of Electricity
Year: 2009
Location: Pune
Client: Tube Investments of India Ltd. (In House Project)
Main Project Features: Automatic Maximum Demand Controller
Positions held: Dy.
Manager
Activities performed: Design & development of PLC based Automatic maximum Demand Controller, Installation & Commissioning of Demand Controller.

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes me, my qualifications and my experience. I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engaged.

Signature of Candidate Vinet Utbal

