

# TRANSPARENT GROUP OF COMPANIES

## Concise Note



**Transparent Energy Systems Pvt. Ltd., established in 1986**  
**ISO 9001 certified**  
**Workshops having ASME, 'S', 'U' and 'R' stamps**

Business groups	Products	Website
Waste Heat Recovery Boilers & Systems (Own designs)	High, medium and low pressure Steam Boilers, Hot Water Generators, Thermal Oil Heaters, Hot Air Generators	<a href="http://www.heatrecovery-system.com">www.heatrecovery-system.com</a>
Turnkey Waste Heat driven Power Plants	Waste heat sources from Cement Plants, Steel Plants, Gas Turbines and Reciprocating Engines, Exhaust Gases from ferrous and nonferrous industries, heat treatment shops, industrial furnaces.	<a href="http://www.heatrecovery-system.com">www.heatrecovery-system.com</a>
Process Boilers & Heaters	§ 102 % Super efficient Gas fired Boiler § 98 % Super efficient Gas fired Hot Water Generators § 95 % Super efficient Heavy Oil fired Boiler § 95 % Super efficient Heavy Oil Hot Water Generator § 93 % Super efficient Heavy Oil fired Thermal Oil Heaters & Hot Air Generators. § 87 % Super efficient Coal / Agrofuel fired Boiler	<a href="http://www.tesprocessboilers.com">www.tesprocessboilers.com</a> (website under development)
Zero Liquid Effluent Discharge Plants.	Systems driven by low grade waste heat sources from Reciprocating Engines, Gas Turbine, process waste heat. Multistage Evaporators with Mechanical or Thermal Vapour Recompessors having Falling Film /Rising Film / Forced Circulation / Natural Circulation / Agitated / Spiral Tube / Plate. § Concentrate disposal through crystallizers, dryers, § Incorporating odor destruction Systems.	<a href="http://www.zldplants.com">www.zldplants.com</a> (website under development)
Super efficient Co-generation Systems	Combined generation of Power, Heat, Refrigeration & Chilling, Evaporation & Drying § Engine based Otto / Diesel cycle Co-generation § Steam Turbine based Rankine cycle Co-generation § Gas Turbine based Combined cycle Co-generation	<a href="http://www.tesplcogen.com">www.tesplcogen.com</a>
Power Boilers  Technology licensing and know how transfer agreement with LaMont – Kessel GmbH, & Co, Germany <a href="http://www.lamont-services.com">www.lamont-services.com</a>	<u>Steam Boilers</u> § Capacities up to 290 TPH § Pressures from 8 to 136 bar § Temperatures up to 535° C <u>Thermal Oil Heaters / Hot Water Boilers</u> § Capacities from 1 MW to 174 MW  <u>Waste Heat Recovery Boilers</u>	<a href="http://www.tespowerboilers.com">www.tespowerboilers.com</a> (website under development)
Ammonia Absorption Refrigeration Plants  Technical collaboration and know-how transfer agreement with Mattes Engineering GmbH, Germany. <a href="http://www.mattes-int.com">www.mattes-int.com</a>	§ Wide operating range – from +5°C to -60°C § Operates on low grade energy sources § Steam / Hot Water / Hot Oil / Fuel fired § Single stage absorption & Single stage desorption. § Two stage absorption & Single stage desorption. § Two stage absorption & Two stage desorption	<a href="http://www.tesplarp.com">www.tesplarp.com</a>
Air Cooled Steam / Vapour Condensers & Coolers	§ Steam, Refrigerants, Ammonia, Thermal oils, Organic Vapours, Condensers / Coolers § High efficiency, fully automatic § Finned tube / Bare tube § Vertical / Horizontal construction.	<a href="http://www.tespl.com">www.tespl.com</a>

Business groups	Products	Website
Steam Rankine Cycle Power Plants	§ Circulating Fluidized Bed Combustion technology § High pressure Steam Boiler & Steam Turbine Generator package § Capacity range - 1 MW to 50 MW § Fuel options - Coal / Bio mass § Condensing options - Water cooled / Air cooled	<a href="http://www.rankineplant.com">www.rankineplant.com</a> (website under development)
Biomass Gasification Plants  Technology licensing & knowhow transfer agreement with Bioenergie Beratung Bornim GmbH, Germany <a href="http://www.b3-bornim.de">www.b3-bornim.de</a>	§ Wet and Dry fermentation of biomasses & biowastes like fruit wastes, vegetable waste, Municipal organic waste, kitchen waste. § Generation of energy from renewable source i.e. Electricity, Steam, Hot Water, Cooling, Chilling, fuel from bio waste § Nutrient rich bio fertilizer production as a by product.	<a href="http://www.bmethanation.com">www.bmethanation.com</a> (website under development)
Waste Incineration fired Power Plants	Turnkey plants with fully automatic mechanized environment friendly incineration technology having afterburners and state of art ultramodern exhaust gas cleaning systems with real time on line monitoring of emission parameters in compliance with EU norms/international norms. <u>Technology options</u> <ul style="list-style-type: none"> <li>• Rotary Kiln</li> <li>• Travelling Grate</li> <li>• Water Cooled Oscillating Grate</li> <li>• Water Cooled Rotary Grate</li> </ul>	<a href="http://www.mswcombustion.com">www.mswcombustion.com</a> ; <a href="http://www.mswuse.com">www.mswuse.com</a> (websites under development)
Energy & Water Conservation Consultancy	Energy & Water conservation techno economic feasibility studies and project development services.	<a href="http://www.tespl.com">www.tespl.com</a>
Combustion Turbine Inlet Air Cooling System  Co-operation understanding with The Cool Solutions Company, USA <a href="http://www.coolsolutionsco.com">www.coolsolutionsco.com</a>	Single and Multistage CTIAC involving LiBr. Chillers and Ammonia Absorption Refrigeration Plant (A.A.R.P.) Evaporative Cooling based CTIAC. Ice & Chilled Water Thermal Storage Synthetic liquid based systems	<a href="http://www.turbineaircooling.com">www.turbineaircooling.com</a> (website under development)



### Transparent Technologies Pvt. Ltd, established in 1986

Business group	Product	Website
Dryers & Coolers	Spray Dryers / Flash Dryers / Fly Ash Dryers / Fluid Bed Dryers / Conveyor Dryers, Spray Coolers / Fluidized Bed Coolers / Bulk Flow Coolers	<a href="http://www.ttpl.co.in">www.ttpl.co.in</a>
Incineration	Paint Stripping Plants (Jig cleaning units) Foundry Sand Reclamation Plants Fluidized Bed Incinerators	
Calcining	Flash Calciners Fluid Bed Calciners	
Granulators	Spray Granulators / Fluidized Bed Granulators / Rotary Granulators	
Waste to Fuel	Waste Segregation / Fuel Preparation / Alternate Fuel Filing in Cement Plants / Waste Fuel Consumption	



**Transparent Pollution Control Pvt. Ltd.**  
**(Formerly Ecolleen Pollution Control Pvt. Ltd, established in 2005)**

Business Group	Product	Website
Air Pollution Control	Bag Filter (Fabric Filters) for product recovery and pollution control. Cyclones and Multiclones, Scrubbers	<a href="http://www.transpol.co.in">www.transpol.co.in</a>
Flue Gas Desulphurization	Rapid Absorption Process – Flash Dryer and Pulse Collector. Dual Alkali Process Plant, Wet Scrubbing Plant, Semi Wet Scrubbing Plant, Dry Scrubbing Plant.	
Fume & Dust Extraction Plants	Top Entry & Side Entry Hood Extraction	
DeNOx / NOx Reduction Systems	Selective Catalytic Reduction (SCR) Process.  Non-Catalytic Reduction (NSCR) Process	<a href="http://www.denox.co.in">www.denox.co.in</a>
Solvent Recovery	Catalytic and Non-Catalytic Oxidation Plants. Organic Liquid Absorption type Recovery Plants Activated Carbon based Recovery Plants	<a href="http://www.solventrecovery.co.in">www.solventrecovery.co.in</a>
Air Stripping Plants & Airborne Solvent Vapour Recovery Plants	Activated carbon based plants & Organic Liquid Absorption Based Air Stripping Plants	



**Decimin Control Systems Pvt. Ltd., established in 2005**

Business Group	Product	Website
Noise Abatement Products & Systems	<ul style="list-style-type: none"> <li>Ø Engine Exhaust Silencers – Gas &amp; Diesel</li> <li>Ø Gas Turbine Stack Silencers</li> <li>Ø Steam / Gas Vent Silencers</li> <li>Ø Marine Silencers &amp; Exhaust systems</li> <li>Ø Anti-Vibration Mounts – All-Metal type</li> <li>Ø Test Bed Acoustics</li> <li>Ø Engine House Acoustics</li> <li>Ø Acoustic Enclosures for Gen-Sets, Compressors, Machinery</li> <li>Ø Acoustic Doors, Louvers &amp; Windows</li> <li>Ø ISO Containerized DG sets/ Compressors</li> </ul>	<a href="http://www.decimin.com">www.decimin.com</a>



**Gianazza Transparent Engineering India Pvt. Ltd., established in 2011**  
**Joint Venture between Gianazza Engineering Ltd. SRL (Italy) and Transparent Technologies Pvt. Ltd.**

Business Group	Product	Website
Edible Oil and Biodiesel Plants	<ul style="list-style-type: none"> <li>• Edible Oil Refining Plants</li> <li>• Oleo chemical Plants for the production and distillation of Fatty Acids and Glycerin</li> <li>• Biodiesel Plants</li> <li>• Special Oil Refining Plants for Energy Application</li> </ul>	<a href="http://www.gianazza.com">http://www.gianazza.com</a> <a href="http://www.gte.net.in">www.gte.net.in</a> <a href="http://www.gte.co.in">www.gte.co.in</a>

	• Bio-ethanol Projects	
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**Ecosustain Energy Systems Pvt. Ltd., established in 2006**  
**100% Subsidiary of Transparent Energy Systems Pvt. Ltd.**

Business Group	Product	Website
Steam Turbine Generators	Stage Extraction / Condensing / Back Pressure Multi-Stage / Single – Stage Superheated / Saturated Steam Inlet	<a href="http://www.ecosustainenergy.com">www.ecosustainenergy.com</a>
Steam Turbine Drives	For Pumps / Blowers / Compressors	
Steam Condensers	Water Cooled Shell & tube / Air Cooled Finned Tube	



**Ecosustain Technologies Pvt. Ltd., established in 2005**

Business Group	Product	Website
Water Recovery and reuse from effluents Turnkey solutions through CECIC	Conceptualization, Engineering, Coordination, Inspection, Commissioning	<a href="http://www.ecosustain.co.in">www.ecosustain.co.in</a>
Vital Technologies used	Ultra filtration, Reverse osmosis (RO) . <ul style="list-style-type: none"> <li>• Super efficient multistage evaporators and Crystallizers</li> <li>• Ultra-violet based wet oxidation systems</li> <li>• High pressure thermal wet air oxidation systems</li> <li>• Absorption and ion exchange</li> <li>• Drying and incineration</li> <li>• Waste heat utilization</li> </ul>	<a href="http://www.ecosustain.co.in">www.ecosustain.co.in</a>

**Business Alliances & Collaborations:**

- 1) Mattes Engineering GmbH, Germany** ([www.mattes-int.com](http://www.mattes-int.com)) World leaders in Ammonia Absorption Refrigeration Plants. Technical collaboration and Knowhow transfer agreement with Transparent Energy Systems Pvt. Ltd.
- 2) LaMont-Kessel GmbH & Co. KG, Germany** ([www.lamont-services.com](http://www.lamont-services.com)) World famous technology providers for wide range of power boilers / heaters and complete power plants. Technology Licensing and Knowhow Agreement with Transparent Energy Systems Pvt. Ltd. for design, manufacture, sell and erect La Mont-steam-boilers, thermal oil heaters, hot water boilers.
- 3) Bioenergie Beratung bornim GmbH – B3 – Germany** ([www.b3-bornim.de](http://www.b3-bornim.de)) Bornim (B3) has several years of international standing in the field of biomass Gasification Products and Systems Technology Licensing and Knowhow Agreement with Transparent Energy Systems Pvt. Ltd. for Wet & Dry Fermentation of solid, semi solid & liquid Biomasses, Bio-diesel and ethanol production technologies etc.
- 4) The Cool Solutions Company, USA** ([www.CoolSolutionsCo.com](http://www.CoolSolutionsCo.com)): Highly qualified well experienced team of engineering professionals and consultants for Combustion Turbine Inlet Air Cooling (CTIAC), District Cooling (DC) and Thermal Energy Storage (TES) including Ice and chilled water storage. Co-operation understanding with Transparent Energy Systems Pvt. Ltd for a wide range of engineering services.

- 5) **M/s. Beaumont Environmental Systems., USA ([www.besmp.com](http://www.besmp.com))** having expertise in various types of Flue Gas Desulphurization & other Pollution Control Equipments like Wet Scrubbers, Dry Scrubbers, Electrostatic Precipitators, Bag Filters etc. Technical collaboration with Transparent Technologies Pvt.Ltd.
- 6) **iac BOET STOPSON ([www.boet-stopson.com](http://www.boet-stopson.com))** World leaders in noise abatement products and systems, Technical collaboration and know-how transfer agreement with Decimin Control Systems Pvt. Ltd.
- 7) **Gianazza Engineering Ltd. Srl, Italy (<http://www.gianazza.com>)** World leader in Edible Oil and Biodiesel Technology. Joint Venture between Gianazza Engineering Srl, Italy and Transparent Technologies Pvt. Ltd. for Edible Oil Refining Plants, Oleo chemical Plants for the production and distillation of Fatty Acids and Glycerin, Biodiesel Plants, Special Oil Refining Plants for Energy Application and Bioethanol Project.
- 8) **HESS FOERDERTECHNIK, Germany (<http://www.hess-foerdertechnik.de>)** having expertise in Waste Segregation, Waste Fuel Preparation and Waste Fuel Firing for Cement Plants / Power Plants etc. Technical Collaboration Agreement with Transparent Technologies Pvt. Ltd.

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