



WASTE-TO-ENERGY SYSTEMS

Turning Municipal, Industrial, and Solid Waste Streams into Productive Power, Steam, and Heat Solutions

Grow Tech is a premier Faridabad-based engineering company specializing in the design, manufacture, and commissioning of industrial process plants, waste-to-energy systems, and thermal conversion solutions. We deliver comprehensive, turnkey Engineering, Procurement, and Construction (EPC) solutions to help businesses and municipalities extract high-value energy assets from low-density, problematic organic and refuse streams.

THE WASTE-TO-ENERGY SYSTEM

Our Waste-to-Energy Systems consist of integrated thermal treatment configurations that safely convert mixed solid waste, industrial refuse, and biomass into usable energy—heat, steam, or electricity. Engineered specifically for industrial estates, progressive municipalities, and processing facilities, our plants provide fully compliant, environmentally safe refuse disposal along with clean energy co-generation.

ELIGIBLE WASTE STREAMS

- **Municipal Solid Waste (MSW):** Local household waste, organic components, and non-recyclable fractions.
- **Industrial Refuse:** Secondary manufacturing by-products, clean packaging, and structural scrap wood.
- **Biomass Feedstocks:** Low-density crop straws, processing off-cuts, agricultural husks, and wood waste.

ENERGY RECOVERY OUTPUTS

- **Clean Process Steam:** High-pressure steam generated to supply manufacturing boilers or heating lines.
- **Thermal Heat & Hot Water:** Fluidized hot-air loops recirculated directly into active thermal drying processes.
- **Co-generated Electricity:** Grid-injectable or plant-powering electricity extracted via turbine integration.



SUSTAINABLE & ECONOMIC IMPACT

Circular Economy Integration: Recovered syngas and flue energy generated during thermal treatment are recycled and recirculated directly back into the primary pre-heating system chambers. This closed-loop process thermal design eliminates continuous external utility dependency, dramatically decreasing overhead costs while maximizing plant profitability.

Waste Valorisation & Diversion: By converting heavy solid wastes, toxic plastics, and organic agricultural residues directly into industrial heat or power, our plants divert valuable materials away from municipal landfills. This converts costly municipal dump liabilities into continuous, high-yielding green revenue streams.

Reliable Local Power Co-generation: On-site thermal systems let industrial manufacturers produce independent, non-interrupted heat or electricity directly inside their facility. This protects production lines from utility tariff volatility, grid blackouts, and critical power distribution bottlenecks.

WHY PARTNER WITH GROW TECH?

- **Turnkey EPC Execution:** We assume complete ownership under a single, accountable contract—managing thermal calculations, custom plant layout P&IDs, fabrication, civil assembly, and final automation trials.
- **In-House Fabrication Control:** Our specialized heavy engineering facility at Pali, Faridabad handles the precision fabrication of core heat exchangers, pressure vessels, reactors, and thermal piping, ensuring accelerated delivery timelines.
- **Certified QA & Service Support:** Running on a strict ISO 9001:2015 quality standard, we guarantee every system is backed by a 12-month mechanical warranty, robust critical spare parts supply, and lifetime technical support.



OUR END-TO-END DELIVERY PROCESS

We execute projects systematically, providing our clients with absolute transparency and progress milestones from original inquiry through to final operator handover:

PHASE	TITLE	CORE FOCUS & KEY MILESTONES
Phase 01	Feasibility & Scope	Analyzing raw feedstock heating values, determining local moisture content, and sizing structural layout requirements.
Phase 02	Detailed Engineering	Drafting system P&ID schematics, modeling structural loads, designing thermal loops, and optimizing energy mass balances.
Phase 03	Fabrication	Precision in-house manufacturing of core reactors, high-pressure steam boilers, and primary flue heat exchangers at our Pali facility.
Phase 04	Erection & Install	Heavy mechanical positioning, alignment of primary reactor chambers, interconnecting high-temp lines, and structural assembly on-site.
Phase 05	Commissioning	Running pneumatic pressure tests, conducting thermal insulation checks, calibrating safety logic loops, and conducting live feed trials.
Phase 06	Training & Handover	Conducting safety operation drills, issuing full manuals, running technical team training courses, and complete plant sign-off.

FACILITIES & INQUIRIES

REGISTERED HEAD OFFICE

Grow Tech

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PALI HEAVY FABRICATION FACILITY

Pali Manufacturing Unit

Plot No. 3, Gali No. 1
Dabua Pali Road, Pali
Faridabad, Haryana, India

Key Capabilities: Heavy pressure vessel manufacturing, automated reactors, custom steam heat exchangers, and heavy industrial piping.