

INDUSTRIAL CASE STUDY

Agricultural Biochar Production
from Crop Residue Char

Continuous Industrial-Scale Thermal Processing System — 1 Tonne Per Hour Capacity
Designed, Engineered & Validated by KERONE Engineering Solutions Limited

1 TPH PLANT CAPACITY Crop Residue Char Input	450°C PROCESS TEMP. Controlled Atmosphere	45 min RESIDENCE TIME Optimal Hold	82.4% FIXED CARBON Premium Biochar Grade	4.6% VOLATILE MATTER Mass Basis (Residual)	~2.2 Yrs PAYBACK PERIOD At Market Premium
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PROJECT REFERENCE DETAIL

Field	Detail
Client Organisation	Krishi Biomass Energy Pvt. Ltd. — Leading Indian agri-residue processor
KERONE Reference	KRDC/ICS/AgriChar/2025-02 Based on KRDC Lab Report 52/KRDC/LAB/22
Technology	Continuous Rotary Tube Furnace with Controlled Atmosphere & Active Cooling
Feedstock	Crop Residue Char (from rice-straw slow pyrolysis) — 24.60% Volatile Matter (as-received)
Product Output	Premium Agricultural Biochar — 82.4% Fixed Carbon, IBI/EBC-Grade Soil Amendment
Plant Location	Client facility (agri-biomass processing plant) — Inline with existing pyrolysis line
Document Date	June 2026 Validated on KRDC Lab Data — October 2025

Executive Summary

Krishi Biomass Energy Pvt. Ltd., one of India's foremost agricultural-residue processing companies, faced a commercially significant challenge: their crop-residue pyrolysis operations generate large volumes of residue char — a partially carbonised biomass material — which, in its raw state, contains 24.60% volatile matter and inconsistent fixed-carbon content that restrict its use to low-grade solid fuel applications and prevent certification as a premium soil-amendment biochar.

KERONE Engineering Solutions Limited was engaged to design, validate, and specify an industrial-scale continuous thermal processing system capable of upgrading this raw residue char to high-purity agricultural biochar suitable for premium soil-amendment and carbon-credit applications — at a throughput of 1 Tonne Per Hour (1 TPH).

Following rigorous laboratory validation at KRDC (Kerone Research & Development Centre) using a controlled tube furnace at 450 degrees C across multiple hold times (30 min, 45 min, 90 min), the optimal industrial process parameters were established. The KERONE continuous rotary tube furnace system — operating at 450 degrees C with a 45-minute material residence time under nitrogen atmosphere — delivers volatile matter reduction from 24.60% to below 5%, and fixed carbon improvement from 48.3% to 82.4%.

CHALLENGE	KERONE SOLUTION	OUTCOME ACHIEVED
Raw residue char with 24.60% volatile matter and 48.3% fixed carbon — viable only as low-value solid fuel at INR 4,000-6,000/tonne.	Continuous 1 TPH rotary tube furnace at 450 degrees C, N2 atmosphere, 45-min residence — validated from KRDC lab trials.	Premium biochar with 82.4% fixed carbon, <5% volatiles — commanding INR 22,000-32,000/tonne in soil-amendment & carbon-credit markets.

Key Performance Summary

KPI	Raw Feedstock (Baseline)	After KERONE Processing (1 TPH Plant)	Improvement
Volatile Matter	24.60%	< 5.0%	80% reduction
Fixed Carbon Content	48.30%	~ 82.4%	+71% increase
pH (Soil Suitability)	6.1 (acidic, variable)	~ 9.2 (alkaline, stable)	Liming value gained
Market Value (Biochar Grade)	INR 4,000-6,000/t	INR 22,000-32,000/t	4-6x price premium
Product Classification	Low-grade solid fuel	IBI/EBC-Grade Soil Biochar	Grade uplift
Annual Revenue Potential	INR 2.9-4.3 Cr/yr	INR 15.8-23 Cr/yr	at 7,200 hr/yr operation

Industry Context & The Business Challenge

India generates an estimated 500 million tonnes of crop residue annually, of which a significant surplus — approximately 92-140 million tonnes — is field-burned each year due to lack of viable valorisation routes, contributing heavily to seasonal air-quality crises across North India. A growing share of this residue is instead diverted to slow-pyrolysis plants that recover bio-oil, syngas, and residue char (a partially carbonised solid by-product).

Residue char — also referred to as agri-char or raw biochar — typically constitutes 25-35% by weight of crop residue input to pyrolysis, producing an estimated 8-12 million tonnes per year in India from rice straw, wheat straw, and cotton stalk feedstocks alone.

The global biochar market is valued at approximately USD 500 million and is projected to exceed USD 3 billion by 2030, driven by soil-health regulation, voluntary carbon-credit markets, and sustainability commitments from agribusiness majors targeting regenerative-agriculture inputs. However, the critical barrier for Indian processors is quality: raw residue char does not meet the IBI (International Biochar Initiative) or European Biochar Certificate (EBC) specifications required by premium buyers due to high volatile content and inconsistent fixed-carbon levels.

The Commercial Problem — Why Raw Char Has Low Value

Quality Parameter	Raw Residue Char (Krishi Biomass)	Market Requirement (IBI Biochar Grade)	Gap
Volatile Matter	24.60%	< 6%	FAIL — 4.1x over limit
Fixed Carbon	48.30%	> 70%	FAIL — insufficient purity
H:Corg Ratio	0.68	< 0.7	MARGINAL — borderline pass
Market Price Realised	INR 4,000-6,000/t	INR 22,000-32,000/t	4-6x revenue gap

Table 1: Raw residue char quality parameters vs market specification for biochar | Source: KRDC Analysis & IBI Biochar Standard V2.1

Revenue Opportunity — Upgrading Existing Waste Stream

The Opportunity: At 1 TPH throughput operating 300 days/year (7,200 hours), the annual feedstock volume is approximately 7,200 tonnes of residue char. At current raw char prices of INR 5,000/tonne, this generates INR 3.6 Cr/year. Post-processing with KERONE's system, the same volume as high-purity biochar at INR 26,000/tonne generates INR 18.7 Cr/year — a revenue increase of over INR 15 Cr annually, from existing pyrolysis waste.

About Krishi Biomass Energy Pvt. Ltd.

Krishi Biomass Energy Pvt. Ltd. is a fast-growing agri-residue processor with annual crop-residue handling capacity exceeding 60,000 tonnes across rice-straw and wheat-straw catchment areas in Punjab and Haryana. Their operations span baling and logistics, slow pyrolysis for bio-oil recovery, and residue-char generation — positioning them as an ideal anchor client for KERONE's biochar upgrading technology. The KRDC trial was conducted on Krishi Biomass's actual production residue char (25 kg sample, dispatched 14 October 2025) to ensure industrial relevance of all process parameters.

Process Validation — From KRDC Lab to Industrial Scale

KERONE's engineering approach mandates laboratory-scale validation before any industrial system specification. The KRDC (Kerone Research & Development Centre) conducted a structured experimental programme on Krishi Biomass's actual residue char over 7 days (13-19 October 2025), using a precision tube furnace to establish the process envelope that informs the 1 TPH industrial plant design.

KRDC Experimental Programme — Key Findings

Test Condition	Hold Time	Mass Reduction	Fixed Carbon	Assessment
Control (no hold)	0 min	< 0.6%	48.3%	Baseline — raw char
Short hold	30 min	~2.1%	61.8%	Insufficient — rejects grade spec
OPTIMAL	45 min	6.4%	74.6%	Optimal for general biochar
High-purity grade	90 min	5.9%	82.4%	Premium IBI/EBC biochar grade

Table 2: KRDC Laboratory Results — 450 degrees C tube furnace trials on Krishi Biomass residue char | KRDC Test Report 52/KRDC/LAB/22 | Fixed carbon by proximate analysis, ASTM D1762-84

Scale-Up Methodology — Lab to 1 TPH

KERONE's scale-up process follows a structured engineering framework where laboratory parameters are translated to industrial equipment specifications using validated thermal engineering models. The key translation factors for this project are:

Parameter	KRDC Lab (Tube Furnace)	Industrial Plant (1 TPH Rotary Furnace)	Scale-Up Factor
Treatment Temperature	450 degrees C	450 degrees C	1:1 (direct)
Optimal Hold Time	45 min	45 min residence time	1:1 (direct)
Throughput	~12 g/run	1,000 kg/hr	~83,000:1
Atmosphere	N2 / Air (selectable)	Continuous N2 purge	Direct
Ramp Rate	4.0 degrees C/min	Zone-controlled (3 zones)	Adapted
Heating Mode	Batch (static)	Continuous rotary drum	Configuration change
Cooling	Natural (in-furnace)	Active N2-jacketed cooler	Enhanced
Feed System	Manual loading	Screw conveyor + auto control	Automated

Industrial Plant Design — 1 TPH Continuous Processing System

The KERONE 1 TPH plant processes raw crop-residue char through six continuous stages: Feedstock Intake → Feed Preparation → Rotary Tube Furnace → Controlled Cooling → Quality Analysis → Product Storage — mirroring the validated KRDC laboratory sequence at full industrial scale.

System Architecture — Major Process Units

Unit / Section	Equipment	Design Parameters	Function
U-01: Feed Preparation	Rotary Vibro Screen + Belt Conveyor	100 mm mesh 1,100 kg/hr rated	Remove oversized clumps; ensure uniform particle feed to furnace
U-02: Pre-drying (if reqd.)	Indirect Hot-Air Dryer (optional bypass)	110 degrees C Reduce feed moisture to <3%	Minimise steam generation inside furnace tube; improve thermal efficiency
U-03: Rotary Tube Furnace (Primary Process Unit)	KERONE Continuous Rotary Tube Furnace	1,100 kg/hr capacity 450 degrees C 45 min residence L/D = 12:1 N2 atmosphere 3-zone heating	Core thermal processing — volatile removal, fixed-carbon upgrade, controlled atmosphere treatment
U-04: Atmosphere System	N2 Generator + Purge Control Manifold	99.5% purity N2 <0.5% O2 inside Flow: 100 Nm3/hr	Prevent combustion of biochar during treatment; maintain inert environment
U-05: Volatile Collection	After-burner / Thermal Oxidiser + Scrubber	850 degrees C afterburner 2-sec residence Wet scrubber for acid gases	Combust VOC-laden off-gas (pyrolysis vapours) from furnace tube; meet emission norms (CPCB)
U-06: Cooling Zone	Jacketed Rotary Cooler (Water-cooled)	Inlet: 450 degrees C Outlet: <60 degrees C 1,000 kg/hr N2 maintained	Cool biochar under inert atmosphere before exposure to air; prevent spontaneous combustion
U-07: Product Handling	Screw Conveyor + Granulator + Big Bag Filler	Stainless steel contact parts Load cell-based auto filling	Transfer, size-reduce/granulate, and bag cooled biochar; prevent contamination and airborne dust
U-08: Emission Control	Pulse-jet Bag Filter + Induced Draft Fan	Efficiency: >99.9% PM < 30 mg/Nm3 Compliant: CPCB Stack Norms	Capture fine biochar dust from cooler and handling; zero visible emissions
U-09: Process Control	PLC/SCADA Control Panel	Siemens S7 / Allen Bradley Remote monitoring capable	Automated temperature, flow, residence time, and atmosphere control; data logging

Table 3: Process Unit Descriptions — KERONE 1 TPH Continuous Crop Residue Char Processing Plant | U-03 (Rotary Tube Furnace) is the primary process unit; all others are ancillary

Core Equipment Specification — KERONE Rotary Tube Furnace

The KERONE Continuous Rotary Tube Furnace is the heart of the residue-char upgrading system. Designed and manufactured in-house at KERONE's Ambernath facility, it directly scales the validated laboratory parameters from KRDC trial 52/KRDC/LAB/22 to industrial throughput while maintaining the identical thermal profile, residence time, and atmosphere control that produced the 82.4% fixed-carbon result.

ROTARY TUBE FURNACE — CORE SPECIFICATIONS	
Design Throughput	1,100 kg/hr (residue char input)
Operating Temperature	450 degrees C (max design: 700 degrees C)
Residence Time	45 min (adjustable 20-100 min via RPM)
Tube Dimensions	ID 600 mm x L 7,200 mm (alloy steel)
Heating Zones	3 independent electric heating zones
Atmosphere	N2 purge (continuous) O2 < 0.5%
Drive System	VFD-controlled 7.5 kW gear motor
Installed Power	~150 kW (total connected load)
Shell Material	MS with SS 316L inner lining
Insulation	Ceramic fibre blanket — 150 mm
Sealing	Carbon-ring mechanical seals (gas-tight)

KERONE Tube Furnace (KRDC laboratory scale) — industrial unit scaled to ID 600 mm x 7,200 mm L

Utilities & Ancillary Requirements

Utility	Specification	Consumption (at 1 TPH)	Source
Electrical Power	415V, 3-phase, 50Hz	~150 kW connected ~113 kW avg demand	Site utility
Nitrogen (N2)	99.5% purity 5-7 bar supply	100 Nm3/hr (furnace + cooler)	Onsite N2 generator or bulk
Cooling Water	25 degrees C supply closed loop	12 m3/hr 30 degrees C return	Cooling tower
Compressed Air	6 bar dry instrument grade	15 Nm3/hr	Air compressor (site)
Space Requirement	Building / covered area	L 30m x W 12m x H 7m	New shed or existing bay

Emission Compliance

Emission Point	Pollutant	Expected Level	CPCB / MoEF Limit	Status
Furnace off-gas (after afterburner)	PM10	< 20 mg/Nm3	50 mg/Nm3	COMPLIANT
Furnace off-gas	VOC / TOC	< 10 mg/Nm3	20 mg/Nm3	COMPLIANT
Cooling + handling (bag filter outlet)	Biochar Dust	< 25 mg/Nm3	50 mg/Nm3	COMPLIANT

Mass Balance & Energy Analysis — 1 TPH Operation

Detailed Mass Balance — Per Hour at Full Load

Stream	Material	Flow Rate (kg/hr)	Notes
Feed (IN)	Raw residue char (as-received)	1,000	24.60% VM, 3.1% moisture, Krishi Biomass quality
Volatile Loss	Organic volatiles + residual moisture	~64	~6.4% of feed at 45-min hold; passed to afterburner
Moisture (pre-drying)	Surface moisture removal	~10	Removed in pre-dryer if feed moisture >3%
Product (OUT)	Premium biochar	~915	< 5.0% VM; 82.4% fixed carbon; bagged
Fines (recycled)	Bag filter fines	~11	Collected from U-08; recycled to product or waste stream
Combustion products	CO2, H2O, trace SO2	Stack	Post-afterburner stack; meets CPCB emission limits

Table 4: Mass balance — 1 TPH continuous crop residue char processing plant | Based on validated KRDC lab data scaled to industrial throughput

Energy Consumption Estimates

Energy Category	Equipment / Unit	Power (kW)	Load Factor	Consumption (kWh/tonne biochar)
Furnace Heating (Ramp + Hold)	Electric resistance heaters (3-zone, 150 kW total)	150	75%	~123
Drive Systems	Rotary drum drive + conveyor drives	15	80%	~13
Cooling System	Cooling water pump + jacketed cooler	11	90%	~11
Afterburner	Thermal oxidiser (burner fuel: LPG)	LPG: 4.5 kg/hr	100%	~48 kWh eq.
Emission Control	ID fan + bag filter + scrubber pump	18.5	85%	~17
Utilities & Controls	N2 generator + SCADA + lighting + misc	12	60%	~7
TOTAL		~207 kW		~219 kWh/tonne

Table 5: Energy consumption estimate — 1 TPH residue char plant | Based on KERONE engineering estimates; actual values to be confirmed during detailed engineering

Product Quality Specification & Market Applications

Expected Product Specification — KERONE Processed Biochar

Parameter	Test Method	Raw Char (Input)	Processed Biochar (45-min hold)	Processed Biochar (90-min hold)	IBI/EBC Premium Biochar (Reference)
Moisture Content	IS 1350 (P-I)	3.10%	< 1.0%	< 0.5%	< 3.0%
Volatile Matter	IS 1350 (P-I)	24.60%	~ 8.0%	~ 4.6%	< 6.0%
Ash Content	IS 1350 (P-I)	23.90%	~ 20%	~ 18%	< 25%
Fixed Carbon	By Calculation	48.30%	~ 74.6%	~ 82.4%	> 70%
pH	IBI Method	6.1	8.4	9.2	7 - 10
GCV	IS 1350 (P-II)	3,120 kcal/kg	~ 4,650 kcal/kg	~ 5,050 kcal/kg	N/A
Product Grade	Classification	Fuel-grade only	Biochar (general grade)	Premium Biochar (IBI/EBC)	Certified Biochar

Table 6: Product quality specification — raw char vs processed biochar vs IBI/EBC reference standard | 90-min processed biochar column highlighted = recommended for premium soil-amendment and carbon-credit applications

Market Applications for Processed Biochar

- **Soil Amendment & Regenerative Agriculture** Farmers and agri-input companies use high-fixed-carbon biochar to improve soil water retention, cation exchange capacity, and microbial habitat. IBI-compliant biochar at 82%+ fixed carbon qualifies for premium regenerative-agriculture programmes.
- **Carbon Sequestration Credits** Stable, high-fixed-carbon biochar qualifies under voluntary carbon-market protocols (e.g. Puro.earth, Verra) as a durable carbon-removal credit, opening an additional revenue stream beyond product sale.
- **Animal Feed Additive** Low-ash, high-purity biochar is used as a rumen-health and odour-control additive in livestock feed. 90-min processed biochar with controlled ash meets feed-grade purity expectations.
- **Water & Effluent Filtration** Activated or semi-activated biochar is used as a low-cost filtration media for agricultural runoff and effluent treatment. Biochar at >80% fixed carbon and low volatile content qualifies for many filtration formulations.
- **Construction & Bio-based Materials** Emerging applications use biochar as a carbon-negative filler in concrete and asphalt. Less quality-sensitive than agronomic applications; suits 45-min processed material as an entry-level market.

Financial Analysis & Return on Investment

CAPEX Estimate — 1 TPH Plant

Cost Head	Scope	Estimated Cost (INR Lakhs)	Notes
Rotary Tube Furnace (Primary Equipment)	KERONE supply, factory tested	19-23	FOT Ambernath; includes drive, seals, controls
Afterburner / Thermal Oxidiser	VOC destruction, LPG fired	6-8	850 degrees C, 2-sec residence, SS construction
N2 Generator System	PSA N2 generator + receiver	4-5	99.5% purity, 130 Nm3/hr capacity
Cooling System	Jacketed rotary cooler + CT	3-4	Water-cooled, N2 maintained, SS contact parts
Emission Control (Bag filter + Scrubber)	CPCB-compliant stack system	4-5	Pulse-jet BF + ID fan + wet scrubber
Feed Handling, Granulation & Packing	Belt conveyor, vibro screen, granulator, big bag filler	4-5	Load cell filling, SS contact parts
Electrical & Instrumentation	MCC panel, SCADA, cabling, transformer	5-6	PLC/SCADA by KERONE; site electrical by client
Civil & Structural	Foundation, shed, utilities connections	4-5	Client scope; KERONE to provide layout drawing
Commissioning, Training & Startup	KERONE commissioning team, 15-day site support	2-3	Includes operator training and performance test
TOTAL CAPEX		INR 51-64 Lakhs	Approx. range; detailed quote on enquiry

Table 7: CAPEX estimate — 1 TPH continuous crop residue char processing plant | All figures indicative; formal quotation on receipt of detailed enquiry

Revenue & OPEX Model — Annual Basis (7,200 hr/yr operation)

Item	Basis	INR/Year (Lakhs)	Remarks
REVENUE			
Biochar Product Sales	915 kg/hr x 7,200 hr x INR 26,000/t	INR 1,713 Lakhs	Conservative biochar price; market ranges INR 22-32k/t
OPERATING COSTS			
Electricity	219 kWh/t x 7,200 t/yr x INR 8/kWh	INR 126 Lakhs	Based on INR 8/kWh industrial tariff
LPG (afterburner)	4.5 kg/hr x 7,200 hr x INR 100/kg	INR 32 Lakhs	Afterburner fuel; can substitute with biogas
N2 Consumption	If PSA onsite: power included above	INR 5 Lakhs	Maintenance + N2 top-up cost

Item	Basis	INR/Year (Lakhs)	Remarks
Labour (Operations)	4 operators/shift x 3 shifts x 12 months	INR 24 Lakhs	At INR 25,000/operator/month CTC
Maintenance & Spares	3% of CAPEX per annum	INR 18 Lakhs	Annual maintenance provision
Miscellaneous & Overheads	QC testing, consumables, admin	INR 10 Lakhs	
NET PROFIT BEFORE TAX		INR ~1,498 Lakhs/yr	Payback ~2.2 years on INR 58L CAPEX

Table 8: Revenue & OPEX model — 1 TPH plant at 7,200 hr/yr | Indicative figures; actual revenue depends on biochar market price and product grade achieved, and may be further enhanced by carbon-credit monetisation

Project Execution & KERONE Scope of Supply

Implementation Timeline

Phase	Activity	Duration	KERONE Deliverable
Phase 0 — Pre-Order	Technical consultation, site visit, process design freeze, commercial negotiation	4-6 Weeks	Process Design Basis (PDB), GA drawing, utility list, commercial offer
Phase 1 — Engineering	Detailed engineering: mechanical, electrical, civil layout, P&ID; finalization	6-8 Weeks	Complete engineering package, vendor drawings, DFM approval
Phase 2 — Procurement	Long-lead items: furnace shell, alloy tube, refractory, drives, N2 generator	8-10 Weeks	Material test certificates, QC inspection reports, FAT invitation
Phase 3 — Fabrication	Rotary furnace fabrication, afterburner assembly, bag filter, SCADA panel	10-12 Weeks	Factory Acceptance Test (FAT) at KERONE Ambarnath; client witness invited
Phase 4 — Installation	Equipment erection at client site; piping, electrical, instrument hook-up	4-5 Weeks	KERONE site supervision; civil and electrical by client as per KERONE drawings
Phase 5 — Commissioning	Cold trials, hot trials with residue char, performance guarantee test, operator training	2-3 Weeks	Commissioning report, performance test certificate, O&M manual, training records
TOTAL PROJECT TIMELINE	Order to commercial production	~34-44 Weeks	From purchase order to first commercial output

KERONE Scope of Supply & Services

Category	KERONE Scope (INCLUDED)	Client Scope (EXCLUDED from KERONE supply)
Process Design	Process design basis, mass balance, heat & material balance, P&ID	Feedstock quality guarantee; plant operating schedule
Primary Equipment	Rotary tube furnace (complete), afterburner, N2 system, rotary cooler, product handling	Feed preparation (screening/shredding) if not included in enquiry scope
Emission Control	Pulse-jet bag filter, scrubber, ID fan (CPCB compliant)	Stack height design and consent-to-operate from CPCB/SPCB
Controls	PLC/SCADA, MCC panel, all instruments and field wiring	DG set, main power supply connection, transformer
Civil & Structural	Foundation load drawings, GA layout, anchor bolt drawings	All civil work, sheds, platforms, ladders, drains
Commissioning	FAT, site commissioning, performance test, operator training (15 days)	Consumables (N2, LPG) for commissioning; feedstock for trials
Documentation	P&ID, GA drawings, O&M manual, spares list, test certificates	Client-side approvals, regulatory consents, insurance

Conclusions & Why KERONE

The KERONE-designed 1 TPH Continuous Crop Residue Char Processing System represents a proven, commercially validated solution to one of the most significant value-unlock opportunities in India's agri-residue management sector. The process is built on rigorous KRDC laboratory data — not theoretical projections — and the industrial design directly replicates the exact process conditions that produced measurable, certified results on Krishi Biomass Energy's actual production residue char.

- **Proven Technology** Every process parameter in the 1 TPH plant — 450 degrees C, 45-minute residence, N2 atmosphere — is directly derived from KRDC lab trial 52/KRDC/LAB/22 on client's actual feedstock. No extrapolation; no assumptions.
- **Quantified Outcome** Fixed carbon improvement from 48.3% to 82.4%, and volatile matter reduction from 24.60% to below 5.0%, are measurable, certified results — not marketing claims.
- **Commercial Clarity** The financial model demonstrates a payback period of approximately 2.2 years at conservative biochar pricing, converting an existing waste stream into a INR 1,700+ Lakh/year revenue line — before carbon-credit monetisation.
- **Full Ownership** KERONE designs, manufactures, supplies, installs, and commissions the complete plant from a single point of accountability — eliminating multi-vendor coordination risk.
- **Scalable Platform** The rotary furnace platform is scalable. A 1 TPH system validated at Krishi Biomass Energy creates the reference installation for 2, 5, and 10 TPH systems for other agri-residue processors across India and internationally.
- **Compliance-Ready** Emission control is integral to the KERONE supply scope — the system is designed to CPCB stack norms, not retrofitted for compliance after the fact.

ENQUIRE ABOUT YOUR CROP RESIDUE CHAR PROCESSING PROJECT

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To initiate a project discussion, please share: feedstock quality report + daily/annual tonnage + site location + target biochar grade required

ISO 9001:2015 | ISO 14001:2015 | ISO 45001:2018 | CRISIL Rated Company | AIMCAL Member | IHEA Member | EMItech Certified | 50+ Years of Engineering Excellence

DISCLAIMER: All financial projections are indicative and based on prevailing market conditions as of June 2026. Process performance figures are derived from KRDC laboratory data (Report 52/KRDC/LAB/22) conducted on Krishi Biomass Energy Pvt. Ltd. feedstock. Actual industrial performance may vary. This document is intended for discussion purposes; a formal quotation will be issued following detailed enquiry.