TECHNICAL BRIEF

Organic Waste to Industrial Value Technical Brief

A technical overview of EcoForward's waste-to-value model, product pathways, buyer evaluation steps, and safe publishing claims.

Audience

Industrial buyers, waste-to-energy partners, circular economy stakeholders

EcoForward transforms organic waste streams into industrial value through a waste-to-value model focused on biomass fuel, renewable fuel options, and black soldier fly protein.

This technical brief explains the process logic, buyer-relevant performance indicators, and recommended evaluation steps. It is not a third-party certification report.

Process Overview

- Waste input: mixed organic waste streams are accepted as input after suitability review.
- Automated preparation: material is prepared through processing steps such as sorting, dewatering, magnetic separation, crushing, and handling.
- Microbial conversion and processing: proprietary microbial additives are applied before heating, drying, and compression.
- Clean output and application: final outputs may include biomass fuel rods, biomass fuel oil, or black soldier fly protein.

Key Performance Indicators

Indicator	Current Stated Value	Buyer Relevance
Max fuel rod heat value	Up to 7,000 kcal/kg	Helps evaluate boiler, kiln, and furnace fit
Waste-to-fuel yield	>=50%	Shows conversion efficiency from input waste
Sulfur content	0.15%	Supports cleaner solid fuel evaluation
Moisture	<8%	Relevant to storage and combustion behavior
Ash content	<15%	Important for ash handling and maintenance

Residual waste	<5%	Indicates low leftover output after processing
Wastewater	Zero discharge	Supports environmental performance
Dioxin emission	Below EU standard	Reference value: 0.0032 ng/m3

Product Pathways

- High-density biomass fuel rods for boilers, kilns, furnaces, district heating, and thermal energy systems.
- Biomass fuel oil for industrial facilities evaluating renewable liquid fuel options.
- Black soldier fly protein for aquaculture feed, poultry and livestock feed, pet food ingredients, and circular agriculture.

Recommended Buyer Evaluation Process

- Define the target application.
- Share technical requirements.
- Review available product information.
- Run testing for fuel performance or feed formulation fit.
- Confirm commercial terms after technical fit is established.

Safe Publishing Notes

- Use cautious phrases such as 'designed to', 'can be evaluated for', and 'suitability depends on equipment and application'.
- Avoid unverified claims such as 'certified', 'guaranteed replacement', 'exported to X countries', or 'monthly capacity of X tons'.