Digester Type Performance Comparison

Best Okay Poor

	Two-Stage Linear Vortex™	Complete Mix	Covered Lagoon
More biogas means more D3-RIN revenues per cow Biogas output per milking cow (avg ft^3/day)	115	80	50
Design generation Assumes all designs are periodically updated	3rd	2nd	1st
Plant longevity (avg years) Steel tanks and flexible membranes degrade faster than concrete	30+	15-30	5-10
Lowest cost per MMBtus output/time A key indicator reflecting a positive ROI			
Can process 100% of food/organic waste Covered lagoon systems MUST bypass solids (this is not a "feature")			
Performance is not "seasonal" Covered lagoon performance varies widely and is dependent upon the weather			
No composting of solids needed Bypassed solids from covered lagoons and complete mix must be separately composted			
Pathogen destruction (e-coli, salmonella, etc.) Harmful bacteria that causes problems for humans			
Odor and weed-seed destruction Complete digestion means more effective odor, vector and weed seed control			
Green House Gas (GHG) impacts avoided Composting emits some methane and also creates nitrous oxide (310x worse than CO_2)			
Renewable power generated per ton of waste More biogas per ton means more power generated per ton too			
Positive carbon footprint Higher operating efficiency/kW generated, longevity and thorough digestion			
Suitable for co-generation (e.g., food waste and manure) Active mixing is required for most offsite organics			