

Glorinda's AnaeroMBR System

AnaeroMBR is a cutting-edge anaerobic membrane bioreactor designed to treat high-strength industrial wastewater while generating clean energy. By combining a completely mixed anaerobic digester with Glorinda's low-energy tubular ultrafiltration (UF) membranes, it delivers exceptional results in COD removal and biogas recovery — all with low operational costs and minimal environmental impact.



Efficient

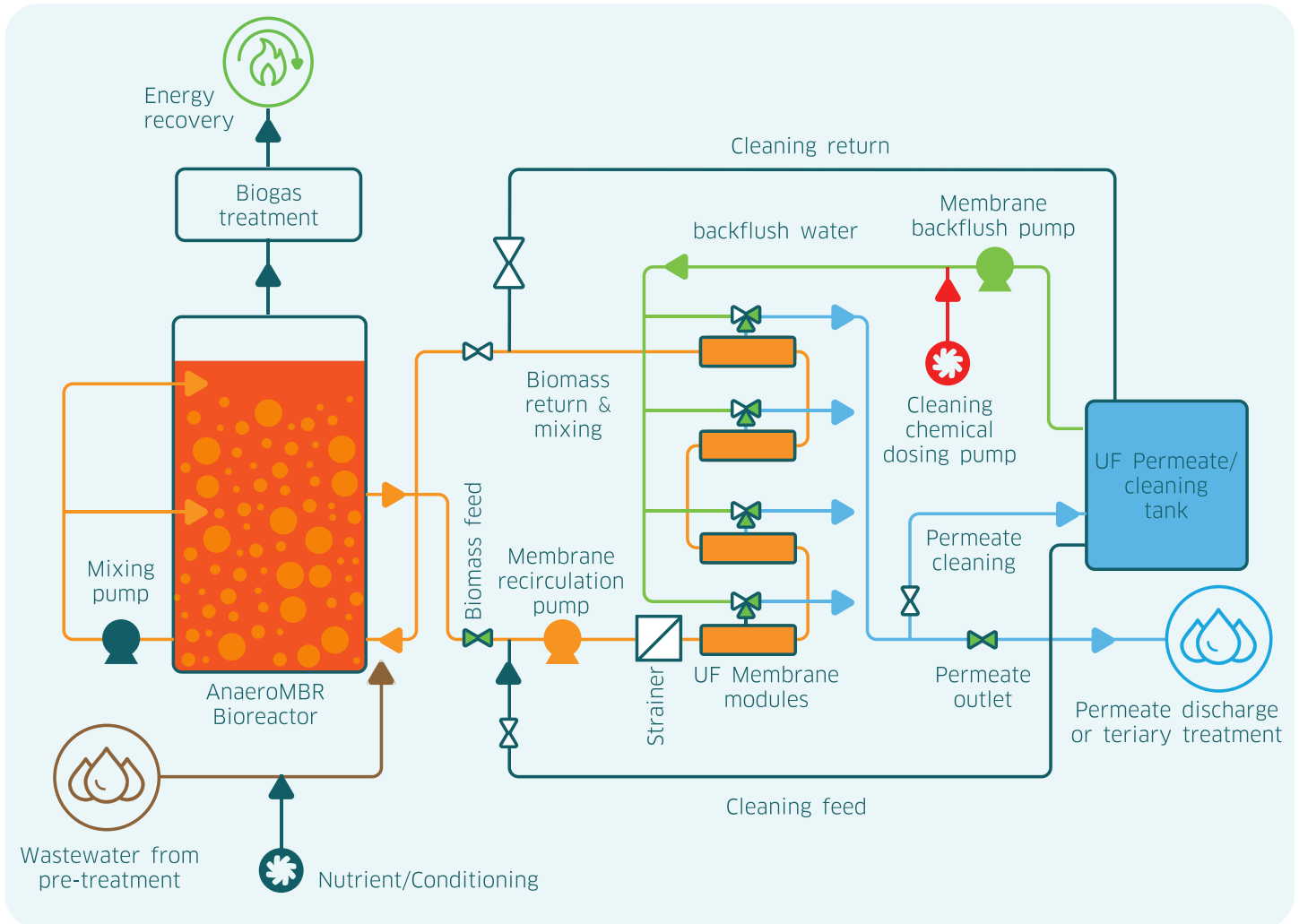


Sustainable

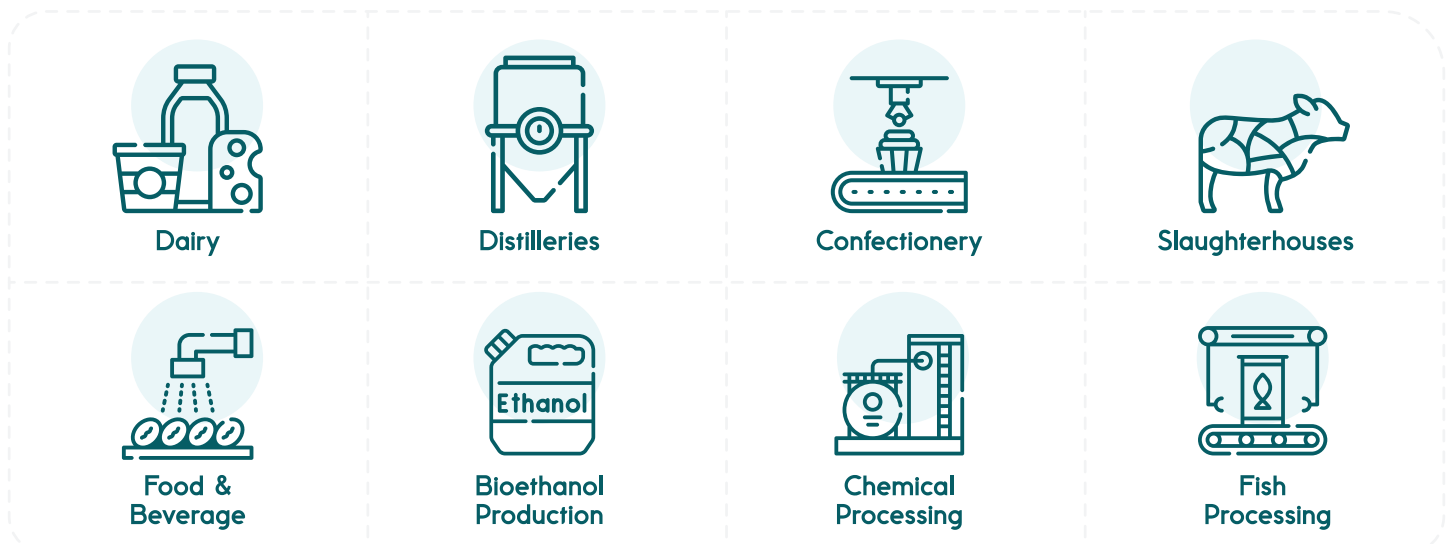


Profitable

An Overview of AnaeroMBR Process



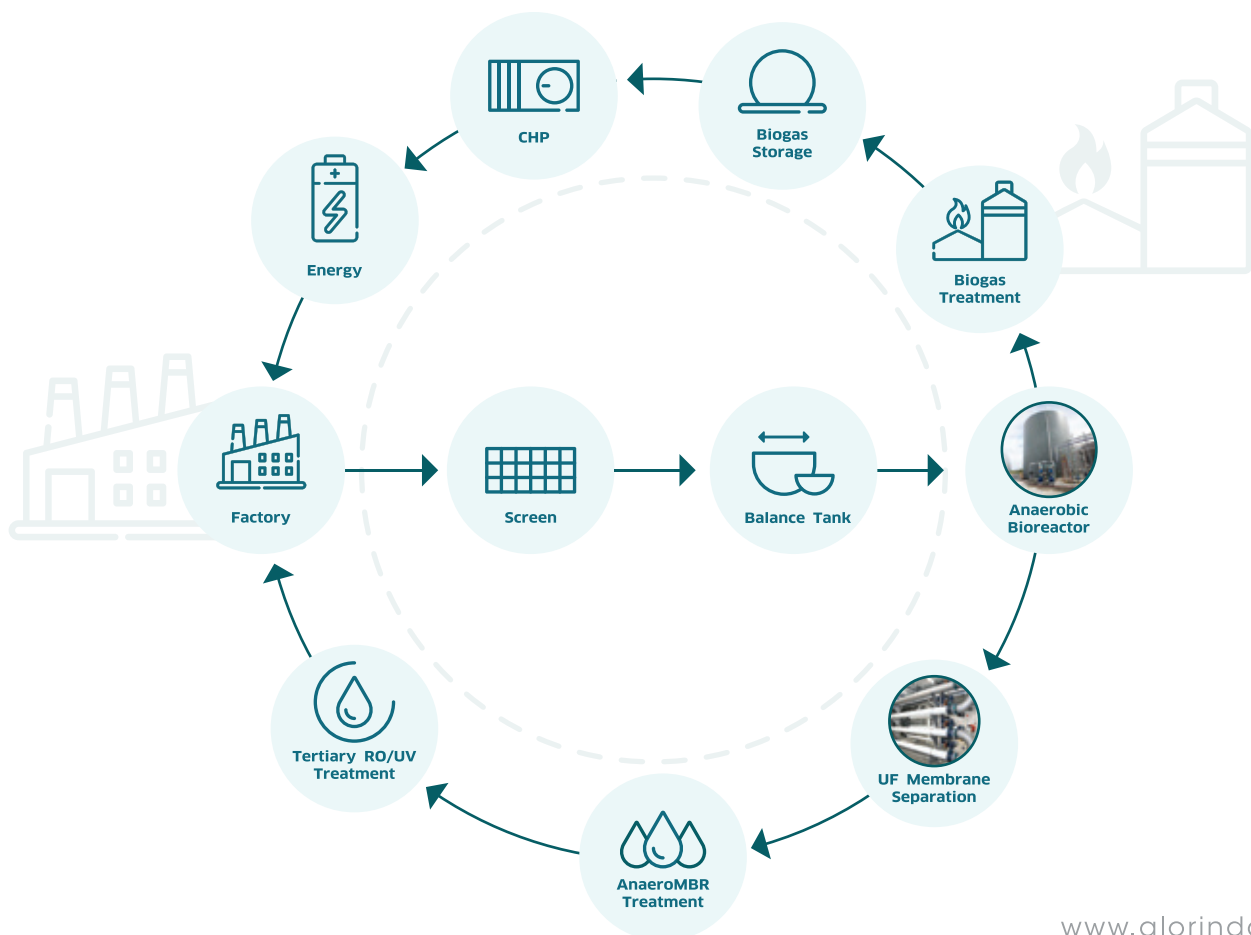
AnaeroMBR System Applications



Why Choose AnaeroMBR?

- **Up to 98% COD Removal:** Achieve superior effluent quality, ready for discharge or reuse.
- **Maximum Biogas Production:** Turn organic waste into renewable energy with high methane yields.
- **Low Operational Costs:** Minimal energy use (1.5–2.5 kWh/m³ net permeate output), no need for aeration, flocculants, or gas scouring.
- **Compact Design:** Suitable for tight spaces, with modular installation and easy expansion.
- **Handles Challenging Wastewater:** Tolerates high COD, TSS, FOG, salinity, and toxic compounds better than conventional anaerobic systems.
- **Minimal Maintenance:** External, “out-of-tank” membrane units allow safe, easy access – High membrane durability (8 years).
- **Fast Start-up:** No need for granular seed or complex configurations. Rapid commissioning.
- **Sustainable:** Cuts sludge production by up to 75% (compared to aerobic process) and supports corporate ESG goals.
- **Effluent Ready for Reuse:** Delivers crystal-clear effluent suitable for water reuse applications.

Energy Reuse Cycle with AnaeroMBR



AnaeroMBR vs Other Methods (At-a-Glance)

Feature	AnaeroMBR	Conventional Anaerobic (UASB/EGSB)	Aerobic MBR
TSS / FOG Tolerance	Very High	Low	Medium
COD Load (g/L)	>250	<15	<10
Biomass Retention	Membrane-based	Granulation	Settling
Start-Up Time	Short	Long (seeding)	Moderate
Pre-Treatment Needs	Minimal	High	Moderate
Effluent Quality	High	Variable	High
Maintenance Access	External, dry	Internal	Submerged
System Complexity	Modular, simple	Complex	Medium
Energy Usage	Low, net positive	Low	High (aeration)
COD Removal	Up to 98-99%	75-90%	Up to 99%

AnaeroMBR Features Compared to Conventional Systems

