

Sustainable Wastewater Infrastructure of the Future

Measures List With Associated Median Energy Savings Level

Measure	Median Energy Savings (facility-wide/annual, unless otherwise noted)
TECHNOLOGIES	
Emerging Diffuser Technologies	25%
Blower Technologies + Optimization	15%
Dissolved Oxygen (DO) Control	15%
Membrane Bioreactors (MBR)	15%
Pure Oxygen (Pure Ox) System	15%
Ultraviolet (UV) Disinfection Systems	13%
Pumping System Technologies + Optimization	10%
Solar Photovoltaic (PV)	N/A
MANAGEMENT APPROACHES	
Infiltration/Inflow (I/I) Studies	38% (annual wet weather flow reduction)
Energy Conservation Programs	25%
Energy Assessments	15%
Energy Management Systems	15%
Rate Structure Management	15%
Real-Time Monitoring & Control	10%
PROCESS IMPROVEMENTS	
Modifying System Operations Seasonally	25%
Ammonia-based Aeration Control (ABAC)	15%
Chemically-enhanced Primary Treatment (CEPT)	10%
RESOURCE RECOVERY	
Combined Heat & Power (CHP)	38% (equivalent energy generation)
Onsite Water Reuse	30% (annual effluent flow diverted)
Anaerobic Digestion	25% (equivalent energy generation)
Heat Recovery	25% (equivalent energy generation)
Inline Hydropower	25% (equivalent energy generation)
Biosolids Energy Recovery	\$500,000 (annual cost savings)

