Waste-to-Energy Biomass Feasibility Checklist

Biomass Resource Assessment
Sources and types of biomass identified Quantity and availability assessed Moisture content considered Collection and transportation logistics evaluated Sustainability of supply verified
2. Technology & Process Selection
Appropriate conversion technology selected (e.g. combustion, gasification, anaerobic digestion) Technology scale matches resource availability Proven efficiency and reliability reviewed Residue
and byproduct management addressed
3. Site & Infrastructure
Site location reviewed and secured Accessibility for feedstock delivery verified Utilities and water supply assessed Proximity to power grid/energy users checked Site permits evaluated
4. Economic & Financial Analysis
Capital and operational cost estimated Feedstock supply contracts analyzed Revenue sources projected Financial incentives and grants examined Break-even and ROI calculated
5. Environmental & Regulatory Review
Emissions limits checked Required permits identified Environmental impact assessment done Waste and effluent management assessed Community and stakeholder concerns addressed
6. Operation & Maintenance Planning
O&M requirements documented Qualified personnel availability Health, safety, and training protocols created Spare parts and servicing considered Monitoring and reporting systems defined