



Waste2Energy Solutions & Approach

Water Treatment & Desalination Solutions

- Markets
 - Emergency Relief: Mobile units that can provide immediate relief to communities of up to 5000 persons in remote disaster or emergency locations
 - Quasi-Government Organisations such as: Harbours and Ports
 - Public Sector Infrastructure: Waste Water Treatment Facilities, Bulk Water Supply from Desalination facilities
 - Large Industries: Mining, Oil & Gas and Food & Beverage

Distillation Solution

- Markets
 - Agriculture
 - Feedstock: Wheat & Potatoes (excess or low quality)
 - Food Processing
 - Bakeries
 - Feedstock: waste carbohydrates (sugars and starch)
 - Beverage Companies
 - Feedstock: sugar-rich surplus materials
 - Landfill Operators
 - Landfill operators with the ability to segregate the carbohydrate-rich components
 - Municipalities or Farm dams
 - Feedstock: Cattails - Cattails grow wild in nutrient enhanced waterways

OFFSETS

- Bioethanol (Alcohol)
 - Highest Grade/Highest Value Nutraceuticals/Pharmaceutical
 - Low Grade/Low Value Mult-Fuels
- High Protein Animal feed

Small Scale Pyrolysis Solution

- Markets
 - Small Farms
 - Feedstock: Biomass, Manure
 - Offsets: Electricity 60kW/h, Hot Water & Sterile Waste
 - Hospitals
 - Offsets: Electricity 60kW/h, Hot Water & Sterile Waste
 - Feedstock: Hospital Waste

Large Scale Pyrolysis Solution

- Large Metro/Municipality
 - Feedstock: Municipal Solid Waste (black bags), Bio-Mass, Used tires, Used Oils, Contaminated Timber
 - Offsets: Electricity 1MW/k per usable 1ton/h, Sterile Ash (roadfill), Sterile recyclables
 - Plant Sizes: 400 tons per day - 6000 tons per day

Approach

- 1 Understand Client Requirements
R:Client, W2E
- 2 Define Client Requirements - Scope Solution
R:Client, Consultant Engineers, W2E
- 3 Review Pre-Feasibility Business Case for GO/NO GO Decision
R:Client, Consultant Engineers, W2E
- 4 Validate Solution & Secure Funding
R:Client, Consultant Engineers, W2E
- 5 Initiate Feasibility
 - Identify Candidate Sites
R:Client, Consultant Engineers
- 6 Selection Solution & Final Business Case
R:Client, Consultant Engineers, W2E
- 7 Negotiate & Close with Client
R:Client, W2E
- 8 Design, Build, Commission, Operate (Train/Mentor) & Transfer (optional)
R:Consultant Engineers, Supplier, W2E
- 9 End-to-End Quality Management (Assurance)
R:Consultant Engineers, W2E

Processes

WtE Pyrolysis

Thermal Mechanical Cracking using thermal decomposition of waste.

Water Treatment & Desalination

Reverse Osmosis (RO)