

"The leading Renewable energy solutions provider in Africa"



• Vision:

To be Africa's first choice in renewable energy solutions.

• Mission:

Implementation of technology into projects that are sustainable, profitable to stakeholders and beneficial to communities and the environment.

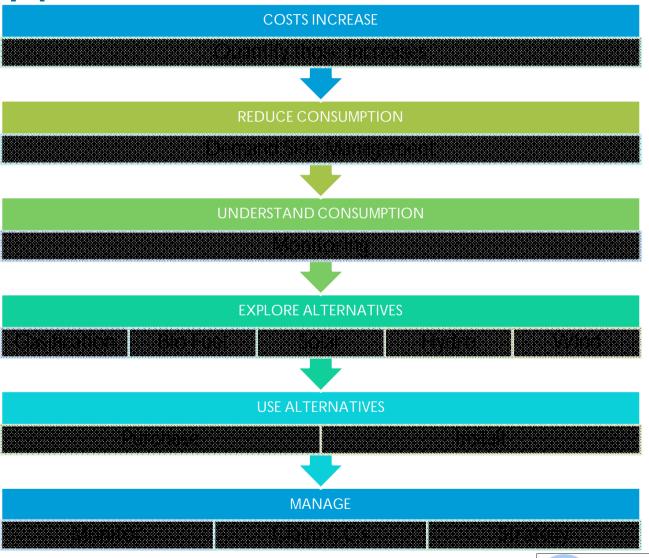


Who is EECOfuels?

- Africa's Largest renewable energy technology supplier
- Over 100 successfully commissioned projects
- Clients include: BHP Billiton, Sun International, Enviroserv, Anglo American, and other blue chip companies
- Largest producer of Bio-diesel in Africa



Opportunities





Product offering value chain:

Fuels

- Fats & Oils
- MSW
- Wood
- Tyres
- Coal

Conversion

- Super Critical
- Low MW Gasifiers
 - Kiln
 - Packed Bed
- Large Pyrolisis

Clean Up

- Scrubber
- ESP
- Cloud scrubber

Generation

- Shengdong
- Gastech



Project Development

Concept

- Mass Energy Balance
- High Level Cost
- Indicative NPV

Feasibility

- EIA
- Financial Model
- Contracts
 - Supply
 - Off take
 - Transmission
- Land Ownership
- PIN/PDD
- Basic Engineering

Execution

- Project Management
- Detailed Engineering
- Procurement
- Construction Management



EECOfuels Value Offering

- Carbon Footprint (Develop, Report, Manage)
- CDM (PIN, PDD, Implement, Trade)
- Technology (Reduce)
- Engineering Based Analysis
- Product Independent



How it all began: Gasification

Typical gas composition:

- •CO 12-18%
- •CO2 10-15%
- •CH4 4-8%
- •H2 3-7%
- •CnHm 1-1.4%
- •O2 0.5-1.2%
- •N2 54-60%
- •Heat value: 4-5 MJ/Nm3
- Maximum tar and particulates20mg/Nm3
- •Minimum operating temperature 1200°C









- -Fixed bed updraft for bio-mass such as nuts, shells, wood chips and pellets.
- Sizes: 120kw, 260kw ,500kw and 1MW





- World largest producer of gas engines.
- Over 8000 in production world wide
- Lowest maintenance cost of all gas generators





CHP: 5 MW India





CBM: 60 MW China



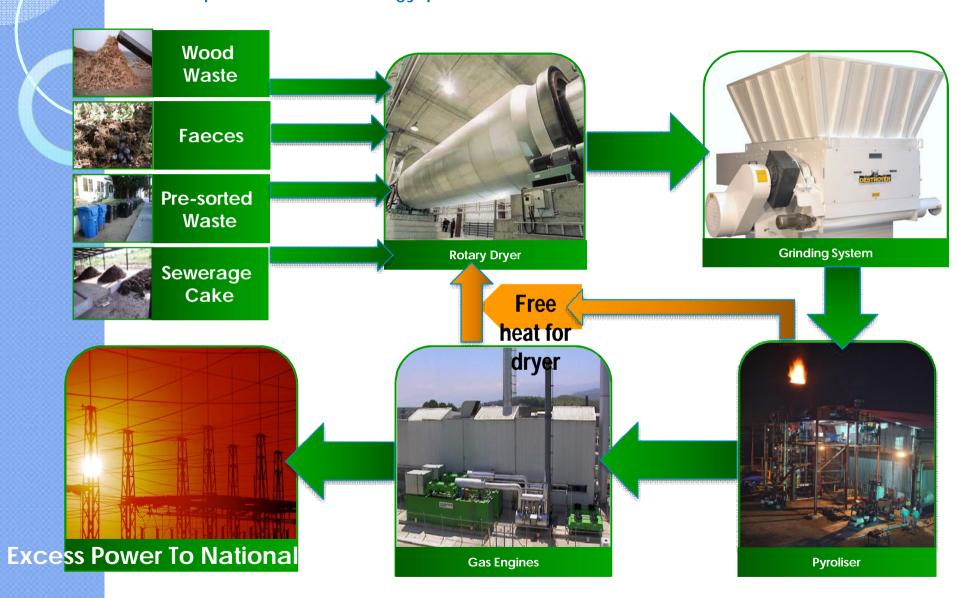


LNG: 16 MW





Municipal Waste to energy process.....





Wet waste water treatment (AD)

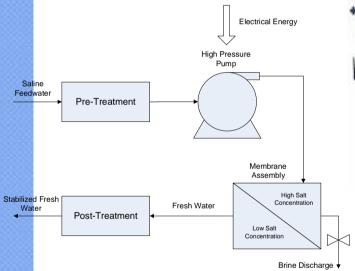


-Waste gas produced from digested wet waste to power Gastech engines

-24kw, 120kw and 260 kw units available



Water Purification: Reverse Osmosis (membrane)





Water is forced through a membrane from an area of high salt concentration to an area of low salt concentration by applying electrical energy in the form of high pressure.

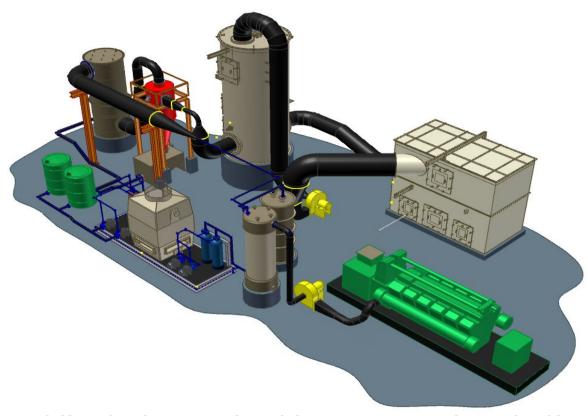


Coal pelletising plant: Woestalleen





Waste to energy plants



- -Rotary kiln design evolved from current updraft
- for the processing of shredded feedstock's such as saw dust and shredded MSW
- -Sizes: 30kw, 120kw, 260kw, 500kw, 1MW and 2MW







- •Esterification Technology.
- •Handles up to 15% FFA, perfect for fats and old oils
- •First projects under development with Chicken farms







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