



Renewable Energies, Inc.

Sustainable solutions for the future

REI
4200 San Jacinto Street
Houston, TX 77004-4853
Single POC: Sandeep Pednekar
Phone: (901) 849-3337
Email: sgPednekar@gmail.com

Waste to Energy

Technology / Capability Overview:

We prevent waste and garbage from polluting and generate clean energy to keep combatant commands clean.

- Completely eliminate air, land and water pollution
- Reduce greenhouse gases & Carbon footprint
- Convert: Munitions, used tires, rubber and plastics to cleaner products; food, wet wood, toilet, sewage waste to Biogas; dry wood, cardboard, packaging, cups, paper waste to Syngas; landfill garbage to Electricity and by-products like organic fertilizer, activated carbon, Bio-Fuels, Bio-Chemicals, Jet Fuel, etc.
- Bring positive environmental changes to bases that do not need remediation while in operation or after base is closed.



Relevance to Combatant Command or other Need:

Category* : Power and Energy

- Wood, yard, toilet, sewage waste or garbage at military base is used as resources and converted into gas for cooking, heating or electricity in bases set up in remote areas.
- Used tires and rubber from heavy vehicles and equipment pollute. Our non-polluting Pyrolytic and Catalytic process converts them into longer lasting asphalt, and pavements.
- We tailor design each unit to the specific tonnage of waste/garbage/tire/rubber/plastic available. Given your size of waste, our units can generate anywhere from 0.25 KW to 10s of Megawatts of electricity and several other products and by-products.
- Our solar arrays provide non-stop energy even when there are black-outs. We provide canopies for parking lots by using Bi-facial solar panels to generate electricity on islands.
- All our products and processes are scalable. They can be small kitchen counter top, mobile or mega units that can be set up in deserts or forests. All are battery backed and provide clean electricity for several days. Our products are even more beneficial off-grid.

Past Performance of Technology and Company:

- Products currently in use successfully for over a decade
- Convert tons of waste to generate Megawatts of electricity
- Process munitions, used tires and rubber to generate useful products
- Provide heat for processes
- Provide heating and cooling for offices
- Make highly potent organic fertilizer
- Make Asphalt
- Make concrete and paving blocks
- Make gas used in food industry
- Use solar panels to generate electricity
- Provide rechargeable battery back-up
- Backed-up energy lasts for several days.



Maturity / Scalability / Cost / Schedule

TRL : 9

We have several units operating successfully for over a decade.

SCALING CONSIDERATIONS: Any size. Capabilities not limited to size, but tons of waste available. Our units can fit kitchen countertop, be mobile, or a 20-story that generate 10s of MWs of electricity. We make Asphalt roads that outlast existing roads four times over.

TIME TO MARKET WITH CURRENT FINANCIAL PLANS: Our products are successfully operating for several years. Can provide smaller units in few weeks to few months for major sizes that produce electricity in Megawatts.

An order from DOD ascertains financing.

TIME TO MARKET WITH FINANCIAL ASSISTANCE: Financial assistance will certainly help. Our innovations are already in the market and operating successfully for over a decade. An Order and initial payment can get us started on construction of units immediately.