

reduce the fuel...
reduce the risk

## Preserving Nature

It is imperative for us to find new, sustainable, renewable, and alternative energy sources of power. But, it is *equally* as important for us to ensure that we protect our precious natural resources, wildlife, and our environment.

Biomass, both woody and agricultural, offers us the best source for clean renewable energy. It is also up to us to be good stewards of the land, and to properly manage these resources for generations to come.

The U.S. has an abundance of biomass materials that can be used for generation of clean energy. It is also used for cogeneration, referred to as combined heat & power (CHP).

Current methods of forest thinning often result in wildfires caused by errant sparks and fly ash.

Proper thinning alsso promotes healthier forest and woodlands growth, providing for a sustainable forest management.

#### Did you know?

According to the U.S. Bureau of Land Management, thinning yields an average of 6 to 7 tons of woody biomass (20 - 23 trees) per acre.

Our patented vortex technology can process up to 8 tons per hour.

Budget cuts have led to less thinning and landscaping activities, leaving forests and woodlands throughout the U.S. to be overstocked and desperately in need of fuel load reduction.

### Comparison of technologies

#### **Current method:**

Our vortex system:

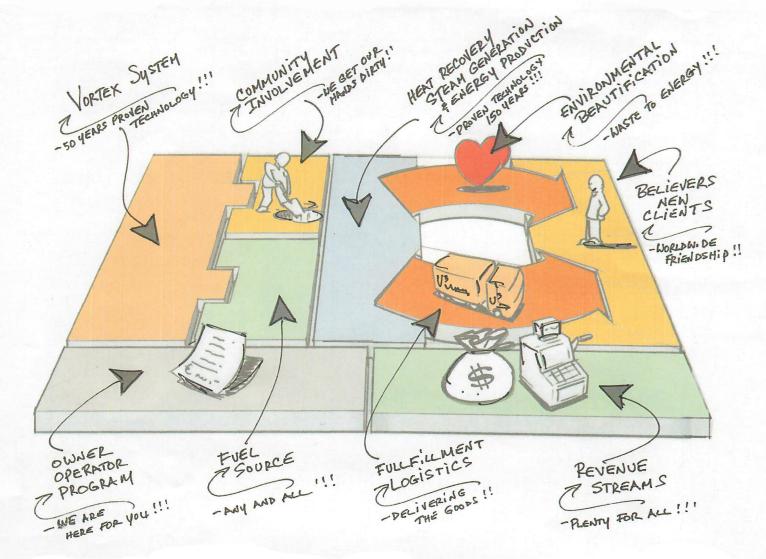
- 1. materials are cut down
- 2. chipped
- 3. treated
- 4. processed
- 5. extruded into lengths
- 6. cut into pellets (feedstock)
- 7. fed into special boilers and burned

- 1. materials are cut down
- 2. chipped
- 3. fed directly into *Thermo*MAX™ units & burned

## Benefits of using our patented ThermoMAX<sup>TM</sup> thermal vortex technology

- ✓ Increased thinning volumes (no need to season or dry)
- **✓** Materials can be processed 24/7 in any weather condition
- **▼** Enclosed system prevents possibility of accidental wildfires
- **✓ Improves wildlife habitats**
- **✓** Inexpensive source for large volumes of renewable energy
- **✓ Low initial investment with high return**

# Recycled Energy Process 2,000 °F Exhaust ThermoMAX TM Thermal Vortex System Pat. 11,835,231 Recycled Energy Process Pressurized Steam Steam Turbine Steam Turbine



Used for centuries, biomass is the most abundant and lowest cost source of renewable, non-fossil fuel energy available. According to the USDA, nearly 1.4 billion dry tons of biomass materials are available each year here in the U.S.

Our proposed micro power generation facilities offer low cost, rapid deployment, as well as a sustainable method for processing wood waste material and conversion into energy. Our state-of-the-art designs allow for greater flexibility, efficiency, as well as a small footprint.

Compared to other methods, our ThermoMAX™ technology can often be up to one fifth of the cost, and can be installed in months, not years.

With hundreds of billions of dollars in revenues in the biomass (and agricultural) market, our technology offers a return on investment in as little as 2 years, compared to 20 to 25 with wind and solar.

