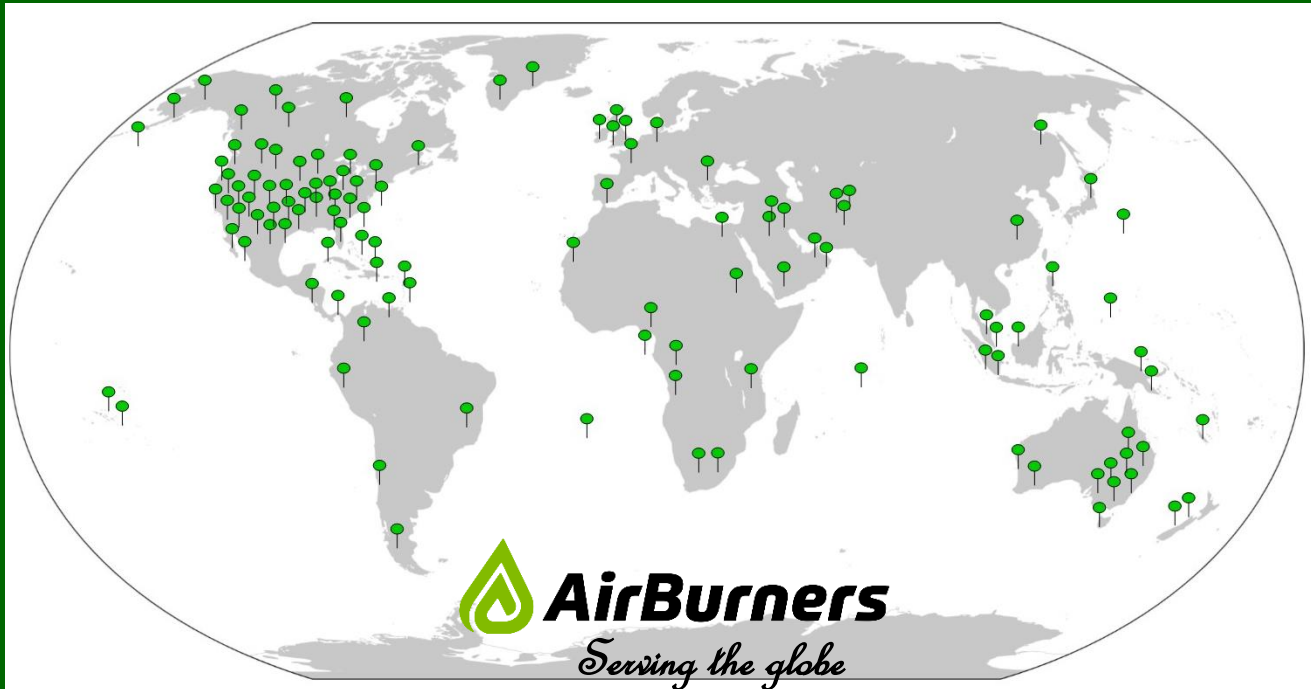




# AIR CURTAIN TECHNOLOGY

## THE OPEN BURNING ALTERNATIVE



# Why is Open Burning an Issue?

- Because vegetative waste is an issue
- Approximately 20 percent of the World's waste is vegetative (World Bank)
- There are very few opportunities to recycle vegetative waste

## We need multiple avenues for disposal

250 Million Tons of Urban Waste collected in 2014

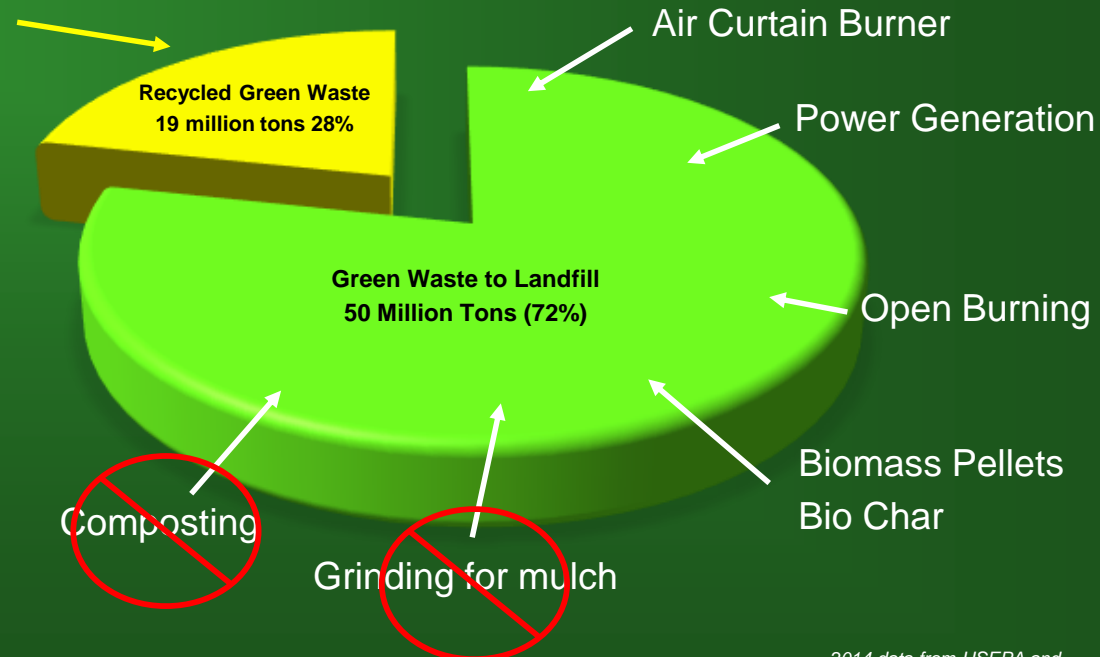
69 Million Tons of it was Vegetative waste

19 Million Tons was all we could recycle

Does not include tree mortality waste

102 million trees in just the Sierra Nevada's

Tree Mortality a worldwide problem



The Mulch and Compost markets are currently over supplied

# Our Approach

Air Curtain Burners

# Air Curtain Machines

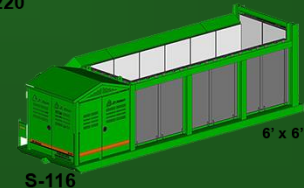
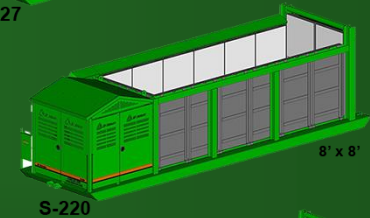
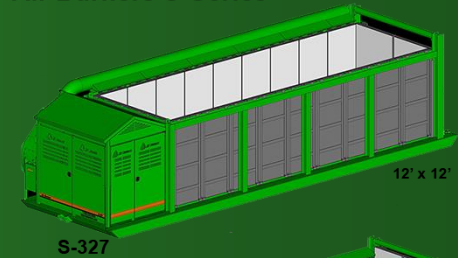
## Primary Use

*“Waste disposal” eliminating clean wood and vegetative waste*  
*Fastest/Highest volume disposal method available*

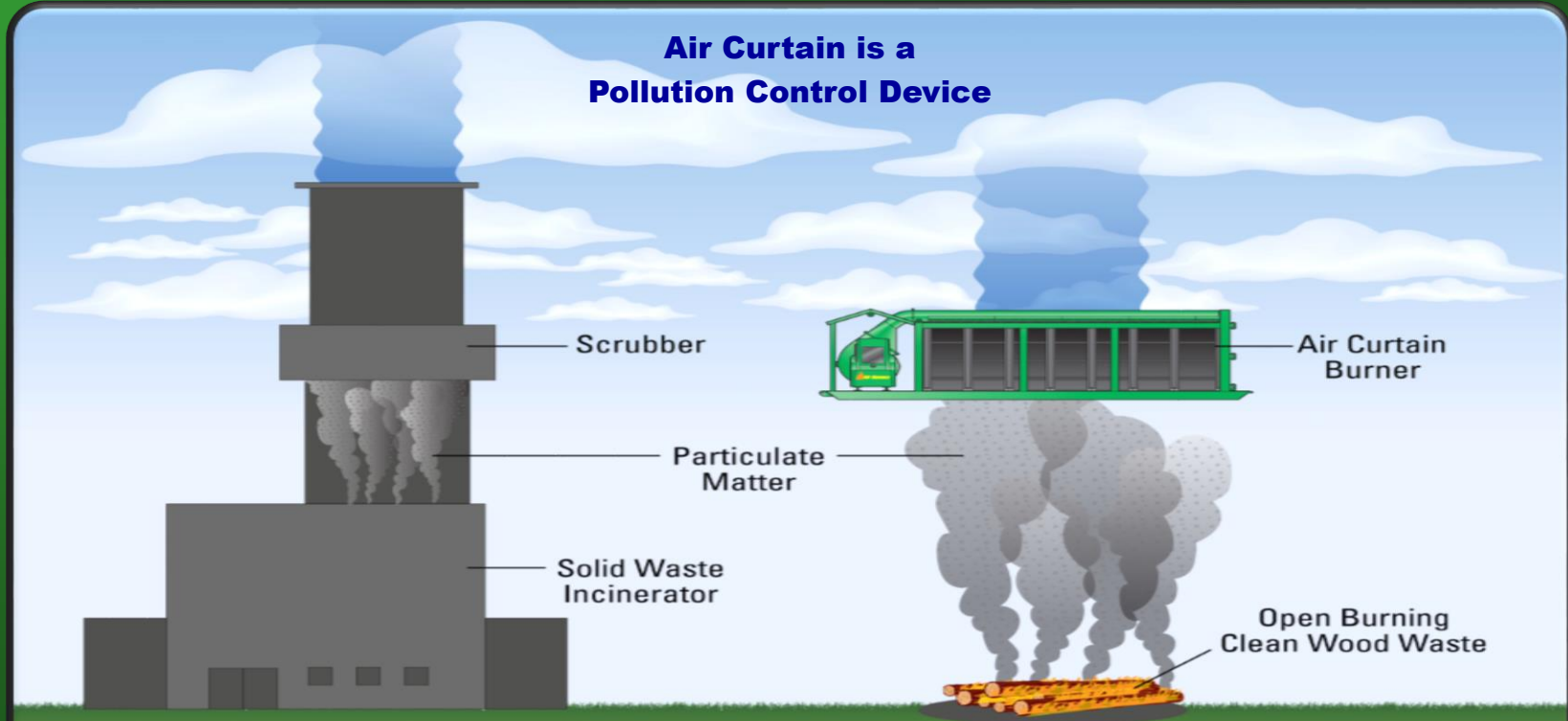
## Why Use Air Curtain Machines

*Save valuable landfill space*  
*Limited market for waste wood products*  
*Reduce or eliminate unnecessary transporting waste*  
*Best method for the environment*

Air Burners S-Series

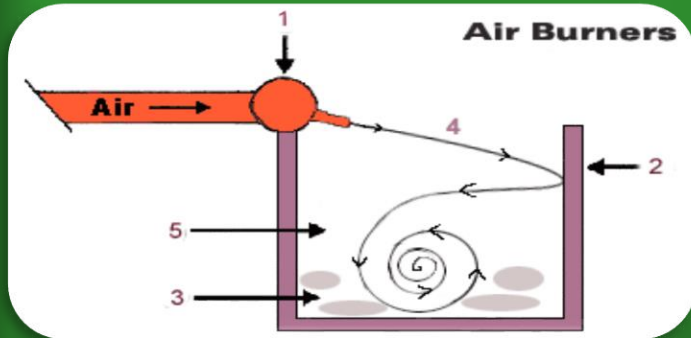


## Air Curtain is a Pollution Control Device

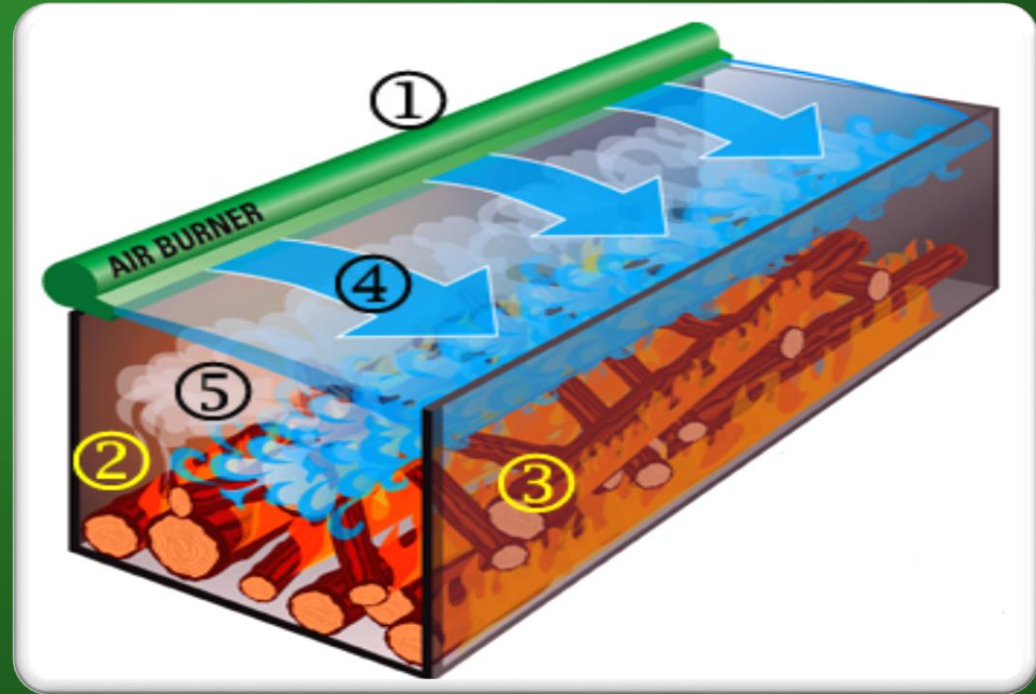


Like a Scrubber, Air Curtain machines do not burn anything, they just control the emissions from something burning

## Horizontal Air Curtain Creates secondary burn chamber



- 1=Air Manifold
- 2=Firebox Refractory Wall
- 3=Wood Waste or Wood Fuel
- 4= Air Curtain (left to right)
- 5=Smoke (PM)



1. High velocity curtain (4) traps particles under the curtain
2. Particles under curtain (5) are reburned

## Primary Purpose

Controlling Particulate Matter – Smoke – Black Carbon

## Proven Technology

Well tested technology in the US and other countries

Air Burners, Inc. is a proud CRADA partner with the USEPA



## Actual Comparison Testing To Open Burning



Particulate Matter release for 20 tons of wood waste

**Air Curtain Burners**  
20 tons of wood waste  
eliminated in 1 hour



**Open Burning**  
20 tons of wood waste  
burning for 48 hours



Environment Canada

### BurnBoss towable



**S327 FireBox**







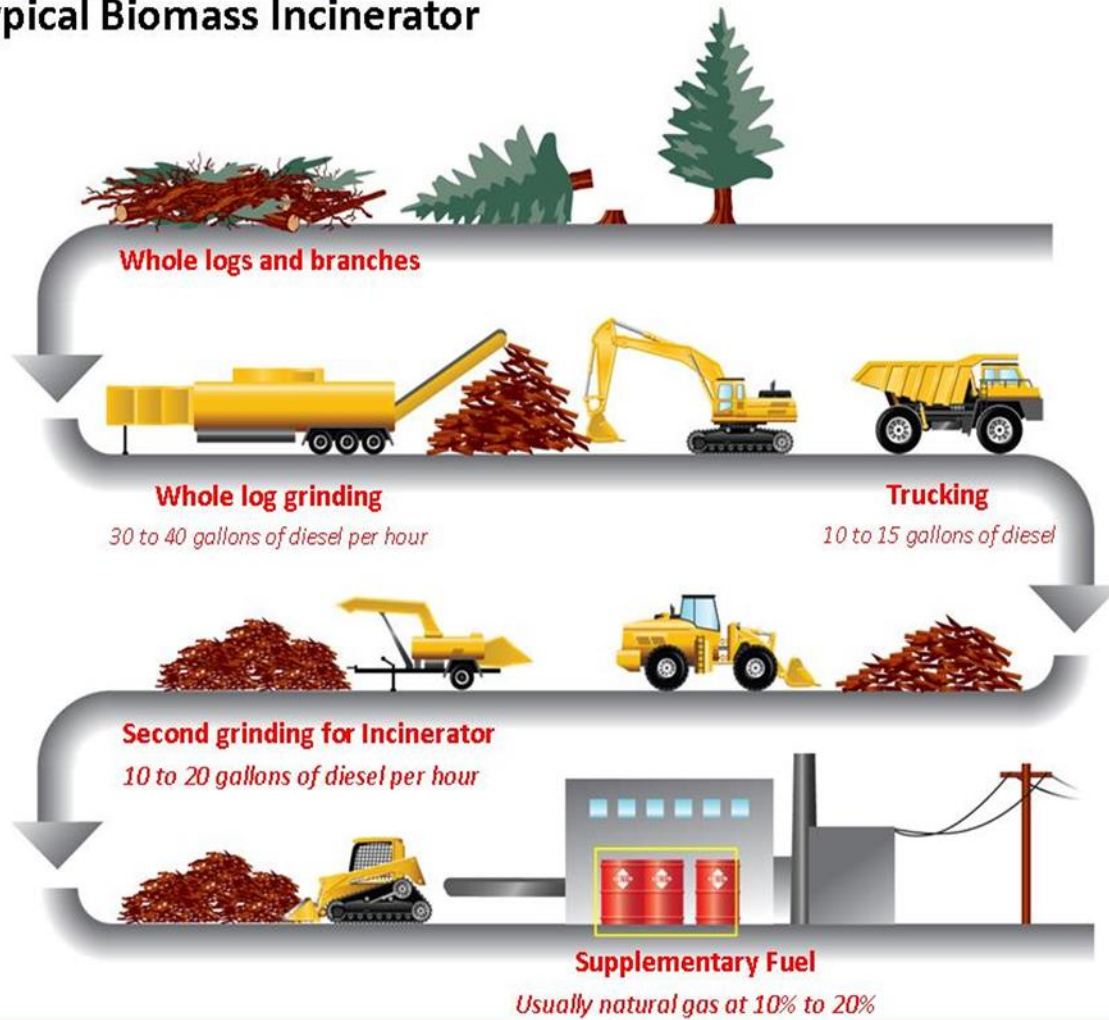
## Roll-Off FireBox



# A New Design For Biomass Energy



# Typical Biomass Incinerator



## Current Biomass Processing

- Expensive
- High Emissions
- Supplemental fuel
- High capital costs
- Permanent structure



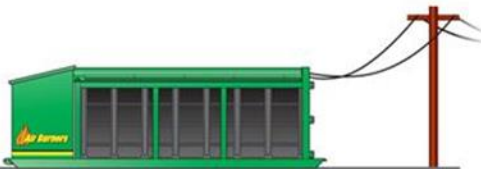
### Trucking

*10 to 15 gallons of diesel*

**Eliminating the  
Cost, Time and Pollution**



**Whole logs and branches**



**Clean Efficient Power**



## PGFireBox

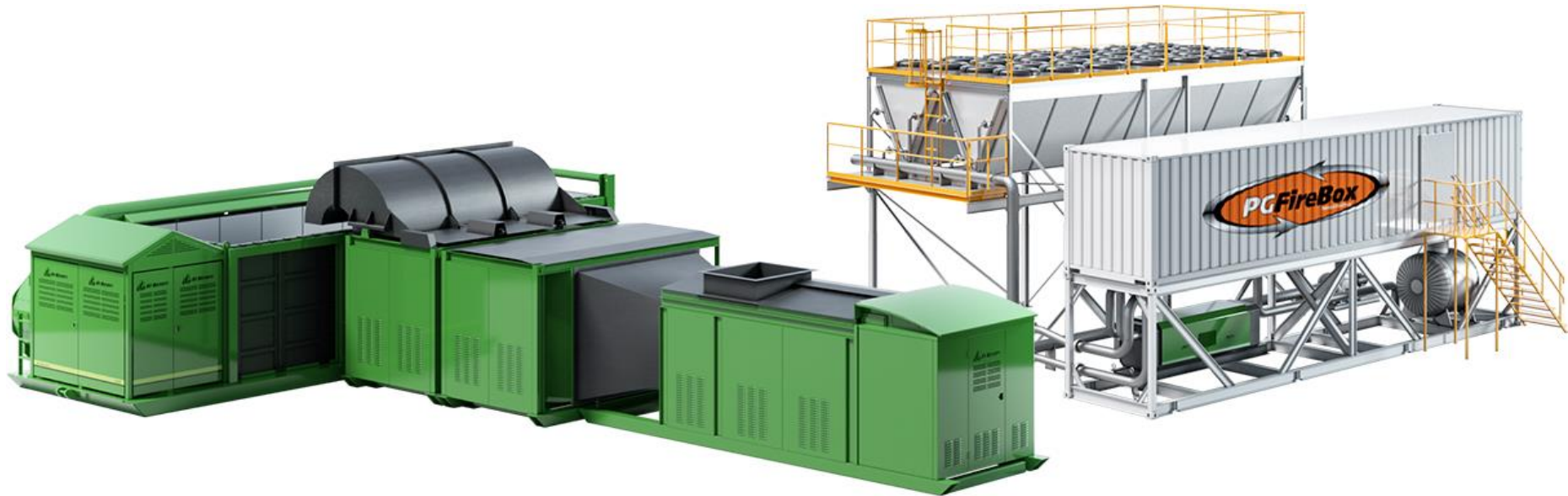
- No processing
- No supplemental fuels
- Movable system
- Lowest emissions
- Easy installation

PGF100 – 100kW



100 kW

PGF500 – 500kW



500kW

PGF1000 – 1 MegaWatt

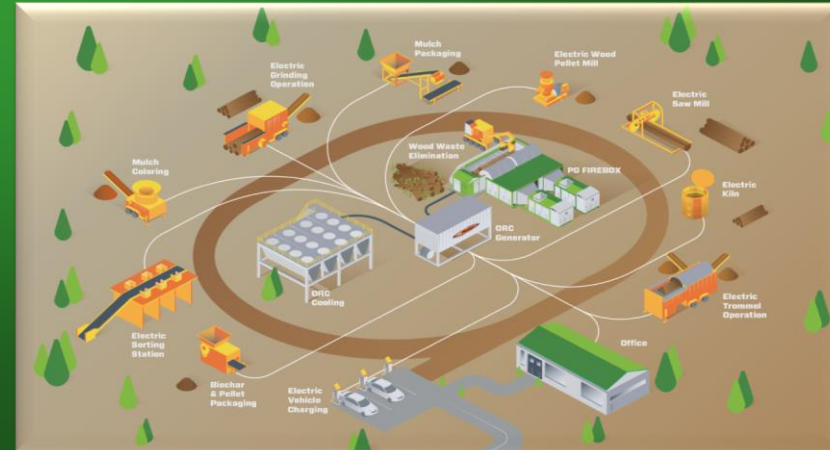


1 MegaWatt



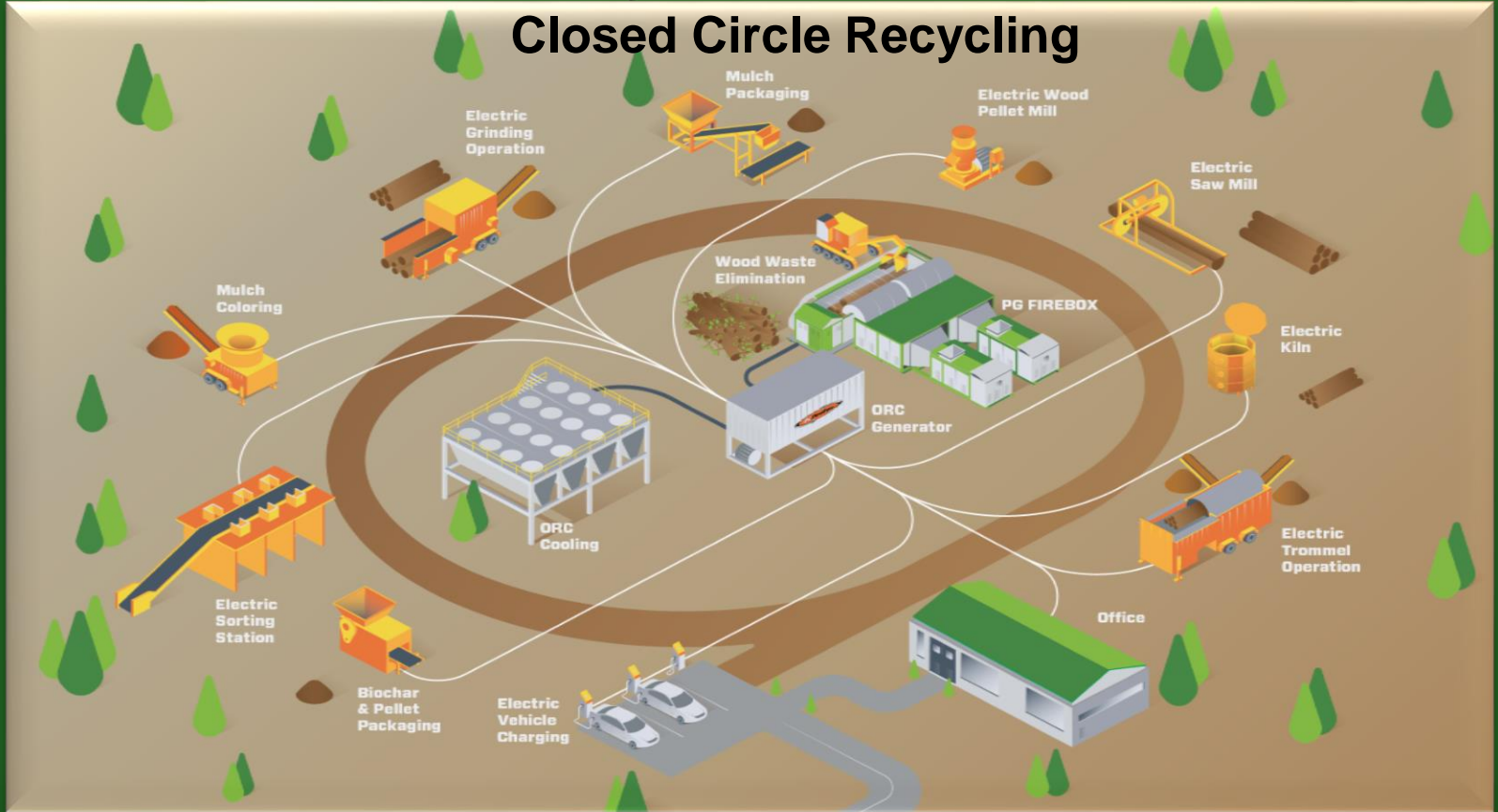
# Closed Circle Recycling

- 1 Megawatt PGF in the center eliminating waste and generating power
- Power is distributed to other waste recycling machines
- Lowers production cost of recycled product
- Does not consume any outside power





# Closed Circle Recycling



**LAST SLIDE**

**THANK YOU**

[www.AirBurners.com](http://www.AirBurners.com)

