Biomass Fuels
A Suppliers Perspective

Definition of Biomass

- plant materials and animal waste used as a source of fuel
Why Biomass

- Green, Renewable Energy source, considered carbon neutral
- Local Labor and resource, keeps money in the direct vicinity of the Biomass Consumer
- Uses readily available resource, possibly under utilized
- $$$ Economical Fuel Source $$$

What should come first? Combustor or Fuel?

- Should fuel sources be identified and combustion equipment specified that can burn it?
  OR
- Should combustion equipment be identified and then a fuel source identified that will burn in it?
Biomass Fuel Sources in Maryland

Urban Wood
Timber Harvest

Forest Improvement
Waste Wood

Sawmill By Products
What Types Available?

Whole Tree Chips
Whole Tree Chips

Hogged Fuel
Hogged Wood

Sawdust
Further Processed

Drying
Wood Pellets

Wood Briquettes
Supply Side concerns

Low Volume per site
Investment High

Too Dirty
Seasonal Forest Access

Sufficient Project Scale
What Should Buyer Know about Fuel?

- Availability
- Particle Size Range
- Ash Content %
- BTU Range
- Moisture Content
- Seasonality
- Consistency
- Volume available
- Competing uses
- $$ \text{COST} $$

Cost Per 1 MM/BTU

What Should Buyer Know about Seller?

- Reputation
- Reliability
- Experience
- Infrastructure
- Quality Control Program
- Alternatives (Plan B)
- Inventories
- Ability to Measure
- Financial abilities
Thank You!