

HAMER PELLET FUEL

- HAMER IS A WEST VIRGINIA FAMILY BUSINESS THAT HAS BEEN IN THE LUMBER BUSINESS FOR 3 GENERATIONS
- IN ORDER TO UTILIZE THE FULL PRODUCT OF THE LOG AND TO PREVENT TAKING SAWDUST TO LANDFILLS, HAMER DECIDED TO MANUFACTURE HARDWOOD PELLET FUEL
- HAMER HAS BEEN MANUFACTURING PELLET FUEL FOR OVER 25 YEARS
- WE ARE THE OLDEST RESIDENTIAL PELLET MANUFACTURER IN THE EASTERN UNITED STATES

HAMER PELLET FUEL ELKINS PLANT



Elkins Plant



ELKINS PLANT



OLD DUST DELIVERY SYESTEM



NEW DRY DUST RECEIVING & TRUCK DUMP



NEW TRUCK DUMP



BAG HOUSE & SCREENER



GREEN DUST SCREENING



DUST SILOS



BAGGING LINE ROLL FILM



ROBOT STACKER



QUICK FACTS ON DENSIFIED BIOMASS RENEWABLE WOOD PELLETS

- WOOD PELLET FUEL IS COMPRESSED DRIED SAWDUST THAT IS EXTRUDED THROUGH DIES TO PRODUCE A PELLET FUEL THAT BURNS AT HIGH BTU'S WITH VERY LITTLE ASH
- THERE ARE THREE PELLET MANUFACTURING FACILITIES IN WEST VIRGINIA
- TOTAL ESTIMATED ANNUAL PRODUCTION OF ALL THREE FACILITIES IS OVER 200,000 TONS
- THERE ARE OVER 1.2 MILLION RESIDENCES/BUSINESSES IN THE U.S. CURRENTLY HEATING WITH PELLETS.
- A TYPICAL HOMEOWNER USES 3 TONS OF PELLETS PER HEATING SEASON (AVERAGE RETAIL PRICE \$230/TON, PELLETS OFFER A FUEL COST PER MILLION BTU OF \$17.00. TO OFFER THE SAME FUEL COST PER MILLION BTU #2 FUEL OIL AND PROPANE WOULD HAVE TO BE PRICED AT \$1.94/GAL & \$1.21/GAL RESPECTIVELY. *FUEL VALUE CALCULATOR, USFS.
- ONE TON OF WOOD PELLETS HAS THE ENERGY EQUIVALENCY OF 2.8 BARRELS OF #2 FUEL OIL.(EIA)
- DIRECT THERMAL CONVERSION OF PELLETS HAS AN EFFICIENCY LEVEL OF ALMOST 80%
- DIRECT THERMAL CONVERSION OF 3 MILLION TONS OF WOOD PELLEST DISPLACES THE EQUIVALENT OF ALMOST 8.5 MILLION BARRELS OF #2 FUEL OIL. THAT IS 356 MILLION GALLONS!

ADDITIONAL FACTS

- PELLET STOVES HAVE EXTREMELY LOW PARTICULATE EMISSIONS DUE TO THEIR HIGH BURN EFFICIENCY AND THE DENSITY OF THE FUEL (<1GM/HR). (EVIROMENTAL PROTECTION AGENCY)
- EVERY TON OF PELLETS USED VS. OIL REDUCES CO2 EMISSIONS BY ABOUT 1.5 TONS
- WOOD PELLETS HAVE A FOSSIL ENERGY RATIO (NET ENERGY OUTPUT/FOSSIL ENERGY USED) OF 12:1. (NET ENERGY VALUE STUDY, UNIVERSITY OF WISCONSIN GREEN BAY)
- THE DENSIFIED BIOMASS INDUSTRY FACILITATES THE CREATION AND DEVELOPMENT OF GREEN JOBS WHILE HELPING OUR NATION MEET ITS ENERGY OBJECTIVES

CURRENT PELLET FUEL APPLICATIONS

- ✓ PRIMARY & SECONDARY RESIDENTIAL HEAT SOURCE (PELLET STOVES, INSERTS, BOILERS)
- ✓ COMMERCIAL BUILDING PRIMARY & SECONDARY HEAT SOURCE (BOILER SYSTEMS) BULK DELIVERY OF PELLETS
- ✓ SCHOOLS AND UNIVERSITY FACILITIES
- ✓ PRIMARY & SECONDARY HEATING FOR POULTRY FARMS & GREEN HOUSES
- ✓ CHP (COMBINED HEAT AND POWER) FOR MULTIPLE BUILDINGS AND HOMES
- ✓ ANIMAL BEDDING & CAT LITTER
- ✓ GRILL & SMOKER COOKING
- ✓ ABSORBANT FOR NATURAL GAS FRACKING

JOB CREATION ESTIMATES & FINANCIAL BENEFIT TO REGIONAL AND LOCAL ECONOMIES

- THERMAL BIOMASS STRENGTHENS THE LOCAL ECONOMY
- THE NORTHEAST USES 84% OF THE NATION'S HEATING OIL AND A RECENT STUDY FOUND THAT SHIFTING ROUGHLY 18.5% OF THE NORTHEAST'S THERMAL ENERGY DEMAND TO BIOMASS BY 2025 WOULD INJECT \$4.5 BILLION ANNUALLY INTO THE REGIONAL ECONOMY AND CREATE 140,000 JOBS.

(SOURCE: HEATING THE NORTHEAST A VISION FOR 2025)

LOCAL ESTIMATED JOB CREATION

- ACCOURDING TO HEATING THE NORTHEAST WITH RENEWABLE BIOMASS VISION FOR 2025, THEY ASSUME 171 DIRECT & INDIRECT JOBS ARE CREATED IN SUPPLY CHAIN FOR EVERY 50,000 TONS PER YEAR OF PELLET PRODUCTION
- IN WEST VIRGINIA THERE ARE 3 PELLET MANUFACTURING PLANTS WITH A TOTAL PRODUCTION CAPACITY OF OVER 200,000 TONS. IF THE STUDY APPLIES THIS WOULD BE OVER 500 DIRECT & INDIRECT JOBS
(PELLET MILL JOBS, CHIPPING AND GRINDING JOBS, LOGGING AND CULTIVATION JOBS, TRUCKING JOBS FOR RAW MATERIAL TO THE MILL & TRUCKING JOBS TO RETAILER)
- THIS JOB TOTAL DOES NOT REFLECT OTHER JOBS CREATED IN RETAIL, STOVE SALES, ETC.
- THE MAJORITY OF THESE JOBS ARE IN RURAL AREAS CLOSE TO WOOD SOURCE
- THE MAJORITY OF MONEY GENERATED THROUGH PRODUCTION, SALES, SHIPPING, WAGES, AND TAXES STAYS IN THE STATE

CURRENT INDUSTRY TRENDS

- 2013 THROUGH 2015 WERE STRONG DEMAND YEARS DUE TO MORE SEVERE WINTERS AND HIGHER FOSSIL FUEL HEATING COSTS
- 2016 -17 HEATING SEASON IS EXPERIENCING WEAK DEMAND AND OVER SUPPLY DUE TO THE MILD WINTER AND LOW FOSSIL FUEL COSTS
- MANUFACTURES ARE CONTINUING TO WORK ON BUILDING ADDITIONAL MARKETS FOR PELLETS TO AVOID THE EXTREME SHIFTS IN RESIDENTIAL HEATING MARKET

CURRENT INDUSTRY TRENDS

- EUROPEAN MARKET HAS CONTINUED TO GROW DUE TO GOVERNMENT INCENTIVES FOR PELLET FUEL AND AGGRESSIVE SHIFT AWAY FROM COAL FIRED POWER PLANTS
- North America exports of wood pellets reached record-highs in 2015, with the US Gulf States increasing shipments by 70% from 2Q/15 to 4Q/15, according to the North American Wood Fiber Review.
- Exportation of wood pellets from North America totaled 6.1 million tons in 2015, which was 2% higher than in 2014 and almost four times as much as in 2010, according to the North American Wood Fiber Review (NAWFR) issued by **Wood Resources International**

Enviva Storage Dome



TAX INCENTIVES AND CREDITS

- BIOMASS COMBUSTED TO PRODUCE HEAT HAS VERY FEW INCENTIVES! IN FACT WE ARE NOT RECEIVING THE SAME INCENTIVES AS OTHER RENEWABLE FUELS.
- ON DECEMBER 19, 2014, THE PRESIDENT SIGNED INTO LAW THE TAX INCREASE PREVENTION ACT OF 2014. PART OF THIS LAW, SEC. 25C TAX CREDIT FOR NON-BUSINESS ENERGY PROPERTY PROVIDES A \$300 CREDIT FOR RESIDENTIAL BIOMASS HEATING EQUIPMENT.
- MANY OTHER STATES IN THE NORTH EAST INCLUDING NEIGHBORING STATES SUCH AS MARYLAND HAVE PUT IN PLACE INCENTIVES AND CREDITS FOR HOME OWNERS AND BUSINESSES WHO CONVERT TO BIOMASS OR PELLETS

TAX CREDIT & INCENTIVES

- THIS IS A PERFECT OPPORTUNITIY FOR WEST VIRGINIA TO BECOME THE LEADER IN PROVEN RENEWABLE ENERGY, FROM A SUSTAINABLE RESOURCE.
- IT IS GOOD FOR WEST VIRGINIA CONSUMERS, GOOD FOR LOCAL JOBS AND GOOD FOR THE ENVIROMENT!

THANK YOU

CONTACT INFORMATION:

TODD WEBB

HAMER PELLET FUEL

PO. BOX 418

KENOVA, WV. 25530

304-453-6381 EXT. 135

WWW.TWEBB@HAMERPELLET.COM